

An Introduction to Computer System

Solutions

Summative Assessment

Multiple-Choice Questions (MCQs)

- Which of the following is not a feature of a computer system?
 - Fast performance
 - Executing logical operations
 - Decision taking capability
 - Never get tired

Ans. c

- Which of the following defines a computer system more accurately?
 - Hardware
 - Software
 - Hardware, software, and data
 - Data, information, hardware and software

Ans. d

- is a special type of pen used to write text and select options on the LCD screen.
 - Stylus
 - PDA
 - Embedded computer
 - All of the above

Ans. a

- Which of the following best defines 'data'?
 - The output coming from the computer system
 - Arranging processed data
 - Report printed by the computer system
 - Raw facts and figures

Ans. d

- Which of the following activities are performed by a computer system for a train reservation system?
 - Checking seat availability
 - Displaying arrival and departure time
 - Making reservation and printing tickets
 - All of the above

Ans. d

- Which of the following computer systems can be used while commuting by a train, bus, or plane?
 - Mainframe Computer
 - Personal computer
 - Supercomputer
 - Laptop

Ans. d

- Which of the following computer systems is used in appliances, such as washing machines and cars?
 - PDA
 - Laptop
 - Embedded computer
 - Mainframe

Ans. c

Very Short Answer Questions

- What do you mean by computer hardware?

Ans. Computer hardware refers to the physical parts of a computer, such as keyboard, mouse and monitor.

- Specify an example of computer hardware and software.

Ans. Keyboard is an example of computer hardware and operating system is an example of computer software.

- Keyboard is an optional component of computer. (True or False).

Ans. False

- Give an example of data.

Ans. Example of data is 15.

- What is the combination of IT and biotechnology known as?

Ans. The combination of IT and biotechnology is known as bio-informatics.

Short Answer Questions

- What do you understand by a computer and how is it useful for you?

Ans. A computer is an electronic device which is used to perform a variety of operations on the basis of a set of instructions called program. Computer is considered as a useful device as it performs a wide variety of tasks within seconds.

- List down the strengths and weaknesses of a computer system.

Ans. The following are the strengths of a computer system:

- Speed

- Storage capacity
- Reliability
- Accuracy
- Consistency
- Versatility

The following are the weaknesses of a computer system:

- No Power to Make Decisions
- No IQ
- No Heuristics

15. What are the various applications of computers in the field of entertainment?

Ans. Computers allow you to create music by using Musical Instrument Digital Interface (MIDI). Computers are also used for brightening or dimming the stage or studio lights. Almost all movies made today use computerized special effects.

16. What are the four basic constituents of a computer system?

Ans. The four basic constituents of a computer system are: input unit, processing unit, output unit, and storage unit.

17. What do you mean by workstations?

Ans. Workstations are computer systems that have greater memory and more extensive mathematical abilities than an ordinary computer. Workstations can be connected to other workstations or personal computers to exchange data.

18. Define technological convergence.

Ans. Technological convergence denotes merging of two or more existing technologies to invent a completely new technology with multiple benefits.

19. List the technologies that have emerged as a result of convergence of two or more technologies.

Ans. The following technologies have emerged as a result of convergence of two or more technologies:

- ICT
- Bio-informatics
- Material Convergence
- Intelligent Bioscience

Long Answer Questions

20. Do you think a computer system can be applied in business and medicine? Why?

Ans. Yes, a computer system can be applied in business and medicine in the following manner:

- **Computer Applications in Business:** Computers have become a necessity for performing various kinds of business activities, such as billing, budgeting, accounting, and reporting. For example, whenever someone want to pay bill in a shopping mall, he/she is benefited with the power and speed of computers.
- **Computer Applications in Medicine:** The computer also plays a vital role in the field of medicine. For instance, it handles the activities of monitoring patients, diagnosing diseases, and so on. There are also many computerized equipment and devices, such as pacemaker that is used to fix the heart-related problems of a patient. Medical students may also practice surgical procedures by using virtual labs.

21. In what ways a computer system can be applied in education and research?

Ans. Computers can be used in classrooms, libraries, and laboratories for preparing reports, displaying information, developing projects, and providing interactive learning aids. It is also possible to create virtual classrooms through computers if the instructor and students are situated in two separate geographical regions and read magazines and journals online.

Moreover, computers can also be used in research as various research scholars and scientists utilize computers to experiment, design, and develop projects. A large number of sophisticated instruments and devices are used in all facets of research and development activities. For example, nuclear reactions in large nuclear reactors are controlled by computers. Computer aided devices can forecast the weather and most natural disasters, such as tsunami and earthquake.

22. How computer systems can be applied in communications?

Ans. Computers provide a wide range of communication technologies, such as e-mail, chat, Web conferencing, and Voice over Internet Protocol (VoIP). E-mail helps users send textual messages and other types of data to their friends and relatives who may be living far apart. Video conferencing or Web conferencing is an effective medium of interaction between two or more persons simultaneously. Chatting provides text-based interaction between two or more persons. VoIP allows sending voice calls using a broadband or a wireless connection instead of a telephone line. The voice call saves the user from typing a long offline message.

23. Do you think computer systems can be applied in the field of manufacturing? Why?

Ans. Yes, a computer system can be applied in the field of manufacturing. It is a challenge to regulate and control a real time manufacturing process, such as preparation and packaging of soft drinks. The use of computer system controls the entire production process in the manufacturing process. In manufacturing, all the activities are automated and controlled by computers. Manufacturing activities, such as putting the cork on the bottle, are accomplished by real-time computer software because it requires high precision and accuracy. Different computer applications may be used to control the tools and equipments in the manufacturing of the products.

24. How computer systems are implemented in governance and defence?

Ans. Computers are used by the government to maintain or deal with bulk of data, such as maintaining census details, measuring per capital income, reserving tickets, paying bills and taxes, etc. The use of computer in government offices also include the e-mail functions, distributing the payments, keeping the records and for direct-mailing the promotions.

Computers are used by the defence staff to perform many important tasks, such as evaluating the trajectories of missiles and broadcasting information. For example, Distributed Common Ground

System-Army (DCGS-A) is an application developed for Army specifications by a consortium of defence contractors. It is a United States Army's primary system for posting and processing the information.

25. What are the basic constituents of a computer? Name them and provide a definition for each.

Ans. The basic constituents of a computer are as follows:

- **System Unit:** Consists of various smaller components, such as Motherboard, Hard disk, Random Access Memory (RAM), Central Processing Unit (CPU) and Sound card.
- **Monitor:** Displays the output of a computer. It is television-like equipment which can be Cathode Ray Tube (CRT), Liquid Crystal Display (LCD) and Light Emitting Diode (LED).
- **Mouse:** Refers to a pointing device that perfectly fits in the user's palm and allows him/her to perform certain activities on screen, such as clicking a button and placing the cursor at a specific location.
- **Keyboard:** Refers to a device that contains keys to feed information into a computer.

26. Computers are unable to take decisions on their own; instead, they depend upon the input being provided by humans. Give explanation in support of your answer.

Ans. Computers are machines and, therefore, we need to provide input to make them work. Although computers provide accurate results, yet they have some limitations as compared to human beings.

One of its limitations is that they do not have self-intelligence and therefore no power to make the decisions on their own. They are helpful in taking the decisions but they cannot take their decisions on their own as they do not possess the key elements required for decision making. These essentials include IQ, knowledge, intelligence, wisdom, ability to judge, etc. They need to be informed time to time regarding the tasks to be performed.

Word Processing Tool — OpenOffice Writer-I

Solutions

Summative Assessment

Multiple-Choice Questions (MCQs)

1. A is a computer application that is used to create, edit, and organize a document.
- Word processor
 - Spreadsheet
 - Presentation
 - Database

Ans. a

2. Which one is not a component of the Writer window?
- Menu bar
 - Document area
 - Status bar
 - Applications menu

Ans. d

3. What is the name given to the area in Writer where you type text?
- Status bar
 - Writer document
 - Document area
 - None of the above

Ans. c

4. Which one is not a non-printing character?
- Paragraph mark
 - Space mark
 - Blank line
 - Tab mark

Ans. c

5. Which of the following shortcut keys selects the line from the cursor position to end of the line?
- Ctrl+Home
 - Shift+Home
 - Shift+End
 - Ctrl+End

Ans. c

Very Short Answer Questions

6. In how many ways can you navigate in a document in Writer?

Ans. We can navigate in a document in two ways.

7. What happens when you press the Ctrl+Home keys in your document?

Ans. The Ctrl+Home key combination lands the cursor at the beginning of your document or the first page.

8. Which option will you use to print the text of your document page width-wise?

Ans. The Landscape option allows you to print the text of your document page width-wise.

9. What is line spacing? How many types of line spacing options are available in Writer?

Ans. Line spacing refers to the space between two or more selected lines in a document. Writer provides seven types of line spacing.

Short Answer Questions

10. Write two advantages of the spelling and grammar feature of a word processor.

Ans. The spelling and grammar feature has the following two advantages:

- Enables you to check spelling mistakes in a document
- Provides possible alternatives for incorrect words

11. Briefly explain paragraph indentation in Writer.

Ans. The paragraph indent specifies the distance of a paragraph from the page margins.

12. Define the First line and Hanging indent in the Writer.

Ans.

- First Line Indent:** Here, you need to provide an indent value in the First line spin box in the Indent section. For the positive indent, you need to provide a positive value and for the negative indent, you need to provide a negative value in the spin box.
- Hanging Indent:** Keeps the text a little inward from the first line. The hanging indent is generally used for bulleted terms, number lists, and glossary terms.

13. How is the insert mode different from the overtype mode in Writer?

Ans. If your document is in the INSRT mode, then when you add new text in a line of your document, the old text will be shifted to the right side of the new text. On the other hand, if your document is in the OVER mode, then the text that you type in a line of your document overtypes or replaces the previous text.

14. Give two advantages of a word processor over typewriters.

Ans. A word processor has the following two advantages over typewriters:

- The speed of typing in the word processor is very fast as compared to any conventional typewriter.

- The word processor allows you to perform all types of editing tasks in a text document, such as insertion, deletion, and modification.

Long Answer Questions

15. How is horizontal alignment different from vertical alignment?

Ans. In horizontal alignment, text is aligned with respect to the left and right margins of the page. The horizontal alignment is of four types namely left alignment, right alignment, center alignment, and justified alignment. On the other hand, in vertical alignment, text is aligned with respect to the top and bottom margins of the page. In vertical alignment, you can align the text in four ways, such as top aligned, bottom-aligned, middle-aligned, and justified.

16. Define the following features of a word processor:

- Text attributes
- Word wrapping
- Spell Check
- Text alignment
- Mail Merge
- Find & Replace

Ans.

- **Text attributes:** Enables you to modify the appearance of fonts as per requirement. The text attributes (such as bold, italic, all caps, and underline) help us highlight certain things in our documents.
- **Word wrapping:** Refers to a special feature of the Writer that arranges the words according to set margins. It means, if a word does not fit in a line, it automatically comes to the beginning of the next line. It saves you from pressing the ENTER key to go to the next line.
- **Spell Check:** Enables you to check spelling mistakes in a document. It also provides possible alternatives for incorrect words. Some word processors also check grammatical mistakes.
- **Text alignment:** Enables you to set the spacing of the lines and paragraphs from the margins. While adding text in a document, you will find that each line of the text appears uniformly at an equal distance from the left margin of the page by default. Such a uniform setting of the text with respect to page margins is called alignment. The following two things affect the text alignment: Left and right margins and indentation of paragraphs, if provided. The text alignment is of two types: Horizontal alignment and Vertical alignment.
- **Mail Merge:** Enables you to type or print more than one document with similar text. For example, the invitation letters where you need to change only the name and address of the recipients and rest of the information will be same for all.
- **Find and Replace:** Enables you to find and replace a particular word in a document. Even if the word the user is looking for has been used hundreds of times in a document, it can be found easily and replaced in one go.

: Spreadsheet Tool — OpenOffice Calc-I

Solutions

Summative Assessment

Multiple-Choice Questions (MCQs)

1. Which of the following is a combination of cells, rows, and columns?
- a. Worksheet b. Cell
c. Formula d. Function

Ans. a

2. Which of the following allows you to add duplicate entries or fill data series in the cells of a worksheet?
- a. Full handle b. Fill handle
c. Data handle d. Series handle

Ans. b

3. Which of the following is an extension of the OpenOffice Calc?
- a. .dos b. .sod
c. .ods d. .calc

Ans. c

4. Which one of the following functions is used to calculate the average of a specified range?
- a. MAX() b. SUM()
c. AVERAGE() d. MIN()

Ans. a

5. Which of the following functions compares two values and returns one of them, depending on some predefined set of conditions?
- a. COUNT() b. IF()
c. COUNTA() d. MAX()

Ans. b

6. Suppose a range of cells contains three number and two text values. Which function will you use to compute the total number of cells that contains the number values and ignores the text values?
- a. COUNT() b. MAX()
c. AVERAGE() d. COUNTA()

Ans. d

7. Which one of the following functions will you use to calculate the grade of students?

- a. SUM() b. AVERAGE()
c. IF() d. PERCENTAGE()

Ans. c

Very Short Answer Questions

8. The intersection of a row and a column is called

Ans. Cell

9. In a cell address, F18:

F refers to

18 refers to

Ans. Column, row

10. Which function returns the largest value from a set of arguments?

Ans. MAX ()

Short Answer Questions

11. Which key combination is used to select an entire worksheet?

Ans. The CTRL+A key combination is used to select the entire worksheet.

12. Which key combination allows you to select the current column completely (all rows in the current column)?

Ans. The Ctrl+Shift+Spacebar key combination allows you to select the current column completely (all rows in the current column).

13. Which key combination allows you to select all the columns in the current row?

Ans. The Shift+Spacebar key combination allows you to select all the columns in the current row.

14. List the options contained in the Delete Contents dialog box.

Ans. The Delete Contents dialog box contains the following options:

- Delete All Text
 Numbers Date & time
 Formulas Notes
 Formats Objects

15. What happens if you do not use the equal (=) sign with a formula?

Ans. If you do not use the equal (=) sign with a formula, then Calc considers the data as a label or value of the cell.

Long Answer Questions

16. List any three functions along with their functionalities.

Ans. The three functions along with their functionalities are as follows:

1. **SUM():** It is used to add all the numbers in a range of cells, and the result is displayed in the active cell containing the formula.
2. **AVERAGE():** The AVERAGE() function is used to get the average (arithmetic mean) of all the passing arguments.
3. **COUNT():** The COUNT() function is used to count the cells that contain numbers.

17. Describe different ways of cell referencing in Calc.

Ans. Cell referencing is the method by which you refer to a cell or series of cells in a formula. Cell references are an important part of creating formulas in a spreadsheet program. Using cell references allows your formulas to update automatically if the value in a particular cell changes and can also assist you in updating formulas as cells are copied or moved. Cell referencing is of three types:

- **Relative cell referencing:** In relative cell referencing, when a formula is copied to a new location in a worksheet, cell references in the formula change in relation to the new location of the formula.
- **Absolute cell referencing:** In absolute cell referencing, cell references in a formula remain the same even when the formula is copied to a new location. For absolute cell referencing, you need to use the \$ (dollar) symbol as prefix before the column and row names in a formula.
- **Mixed cell referencing:** You have already learnt that a cell address has two parts—first is the column letter and second is the row number. If you put the \$ sign before both these parts (row number and column letter), the cell address becomes an absolute cell reference. When you do not put the \$ sign before any of the parts, the cell address remains a relative cell reference. However, if you use the \$ symbol with only one part of the cell address, either with the column letter or the row number, it is called the mixed cell referencing. In mixed cell referencing, one part of the cell address is an absolute reference while the other part is a relative reference.

18. How copying a range is different from moving a range?

Ans. Copying a range means copying the desired content in the spreadsheet and pasting it at the required location in the same spreadsheet. When we copy a range, the data remains available at its original location. On the other hand, moving a range means moving the data from its original location and placing it at a new location. In other words, the data is no more present at its original place.

19. What is the difference between absolute referencing and relative referencing?

Ans. In absolute cell referencing, cell references in a formula remain the same even when the formula is copied to a new location. On the other hand, in relative cell referencing, when a formula is copied to a new location in a worksheet, cell references in the formula change in relation to the new location of the formula.

In addition, if you put the \$ sign before both these parts (row number and column letter), the cell address becomes an absolute cell reference. When you do not put the \$ sign before any of the parts, the cell address remains a relative cell reference.

20. What do you understand by an argument?

Ans. Arguments refer to the values or cell references that are passed to a function. The arguments are passed within the parentheses used in functions. The argument can be of any type, such as numbers, text, and Boolean values, such as true or false. In addition, you can also pass formulas or other functions as arguments.

21. What is the procedure to clear the content of a worksheet?

Ans. Perform the following steps to clear a worksheet:

1. Select a worksheet by clicking the Select All button or by pressing Ctrl+A keys, as shown in Figure 1:

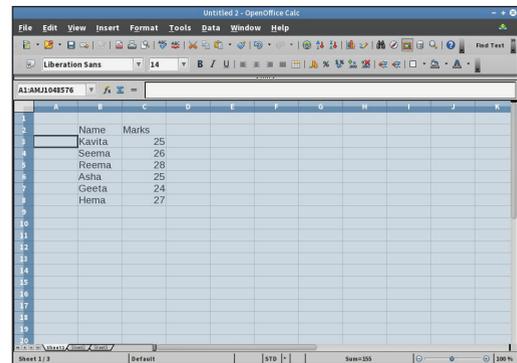


Figure 1: Selecting the Entire Worksheet

2. Press the Delete key on the keyboard. The Delete Contents dialog box appears (Figure 2).
3. Select the Delete All option (Figure 2).
4. Click the OK button, as shown in Figure 2:

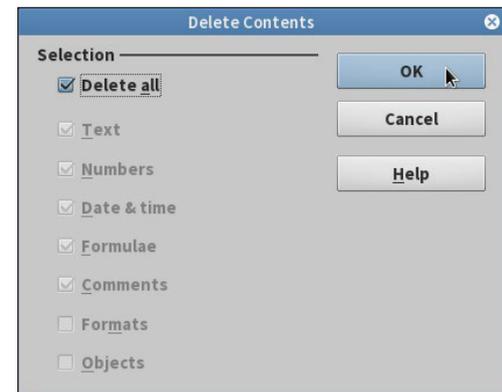


Figure 2: Displaying the Delete Contents Dialog Box

22. How can you insert blank cells in your worksheet?

Ans. The OpenOffice Calc allows you to insert one or more blank cells in your worksheet. Perform the following steps to insert blank cells:

1. Select a range of cells where you want to insert the blank cells.

In our case, we have selected B2:C8, as shown in Figure 3:

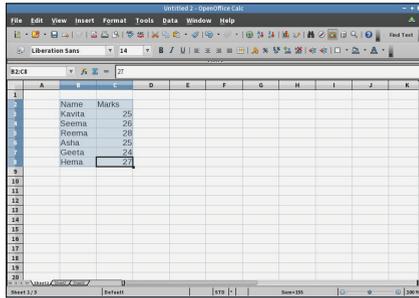


Figure 3: Selecting Cell Ranges

2. Select the Insert Cells option through the Menu bar, as shown in Figure 4:

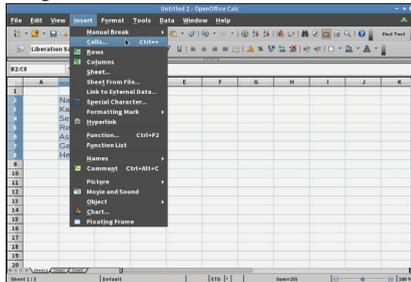


Figure 4: Selecting the Cells Option

The Insert Cells dialog box appears (Figure 5).

3. Select a desired option for shifting the existing cells to make way for the new blank cells. In our case, we have selected the Shift cells right option (Figure 5).
4. Click the OK button, as shown in Figure 5:

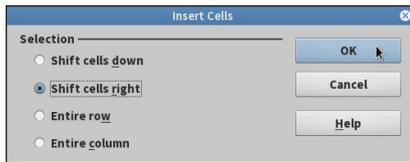


Figure 5: Displaying the Insert Cells Dialog Box

As you click the OK button, the selected number of blank cells gets inserted in your worksheet, as shown in Figure 6:

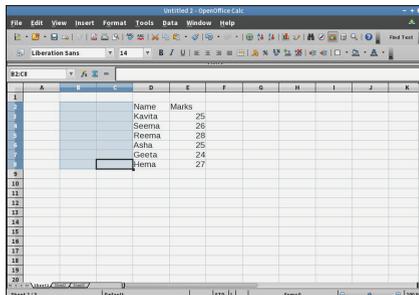


Figure 6: Displaying the Document After Inserting Columns

If you want to stop the process of insertion of cells, click the Cancel button in the Insert Cells dialog box (Figure 5).

23. Write steps to insert three columns in a worksheet.

Ans. Perform the following steps to insert a column in a worksheet:

1. Select a column before an existing column where you want to insert a new column in your worksheet. In our case, we have selected column E (Figure 7).
2. Select the Insert menu on the menu bar. A drop-down menu appears (Figure 7).
3. Select the Columns option in the drop-down menu, as shown in Figure 7:

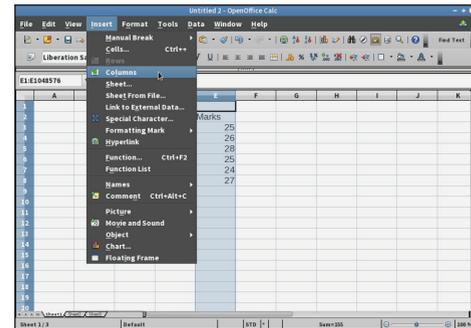


Figure 7: Inserting a Column

Now, the column is inserted. Similarly, you can insert two more columns, as shown in Figure 8:

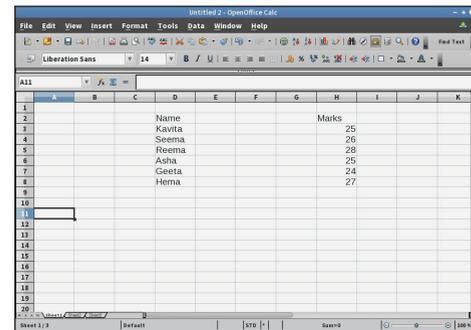


Figure 8: Displaying the Document After Inserting Three Columns

24. State the names of two important parts of a function.

Ans. The following are the two important parts of a function:

- **Arguments:** Refer to the values or cell references that are passed to a function. The arguments are passed within the parentheses used in functions. The argument can be of any type, such as numbers, text, and Boolean values, such as true or false. In addition, you can also pass formulas or other functions as arguments.
- **Structure:** Refers to the structure of a function, which starts with the name of the function and ends with the opening and closing parenthesis. In the function structure, the arguments are separated by comma (.). To use a function in a worksheet, first you need to type the equal (=) sign in front of the function name.

25. Differentiate between the MIN() and MAXA() functions.

Ans. The Min() function returns the smallest number from a list of arguments. On the other hand, the MaxA() function is similar to the Max() function. The MaxA() function also includes the text and logical entries.

26. What is the use of the AVERAGE() function?

Ans. The Average() function is used to get the average (arithmetic mean) of all the passing arguments. The syntax of the Average() function is shown in following code line:

=Average(number1; number2; ...; number10)

Perform the following steps to use the Average() function:

1. Type some values in your worksheet (Figure 9).
2. Place the control in a blank cell or where you want to calculate the average.
3. Type the function in that cell as = Average (reference of cells, which consists the exact values). In our case, we have typed the function as = Average (C3:C8).
4. Press the Enter key on your keyboard.

The average marks are calculated, as shown in Figure 9:

	A	B	C	D	E	F	G	H	I	J	K
1											
2		Name	Marks								
3		Kavita	25								
4		Seema	26								
5		Reema	28								
6		Asha	25								
7		Geeta	24								
8		Hema	27								
9											
10		Average	=AVERAGE(C3:C8)								
11			25.8333								
12											
13											
14											
15											
16											
17											
18											
19											
20											

Figure 9: Calculating the Average Marks

27. Explain the following function: =IF(10>20; “Ok”; “too large”)

Ans. The preceding function returns the “too large” value because the condition 10>20 is false as 10 is smaller than 20.

Formative Assessment

Application-Oriented Questions

1. Answer the following questions:

- a. Tick (✓) the following option(s) that shows the use of a spreadsheet program.

- Controlling output from scanner.
- Drawing picture of the car you want to buy.
- Calculating loan repayments.
- Writing application to the bank manager.
- Estimating future spending.
- Displaying the balance carried forward each month of the year in a graph.

- b. Tick (✓) the option representing the space a spreadsheet file (.ods) uses on a back-up storage device.

- 100MB
- 1GB
- 10KB
- 30bytes
- Obits

Ans. a.

- Controlling output from scanner.
- Drawing picture of the car you want to buy.
- Calculating loan repayments. (✓)
- Writing application to the bank manager.
- Estimating future spending.
- Displaying the balance carried forward each month of the year in a graph. (✓)

b.

- 100MB
- 1GB (✓)
- 10KB
- 30bytes
- Obits

2. The Student Details table that contains the information related to the student’s marks is shown as follows:

	A	B	C	D	E	F
1						
2	Student Name	Roll No.	English	Maths	Science	Total Marks
3	Deepak	101	40	44	48	
4	Haji	102	34	46	47	
5	Gopal	103	45	37	45	
6	Krishna	104	39	49	39	
7	Yogendra	105	47	45	45	
8	Manohar	106	43	36	49	
9						
10						
11						

Answer the following questions based on the preceding worksheet:

- Use the SUM() function in the Total Marks column to add total marks in three subjects of all the students.
- Count the total number of students whose records are added in the Student Details table.
- Find out the maximum marks in English.
- Find out the minimum marks in Maths.

Ans. a. To add total marks in three subjects of all the students, you need to type the =Sum(C3:E3) formula in the F3 cell and press the Enter key from the keyboard. After this, copy and paste the formula in the F4 to F8 cells to add total marks of other student. The result is shown in Figure 10:

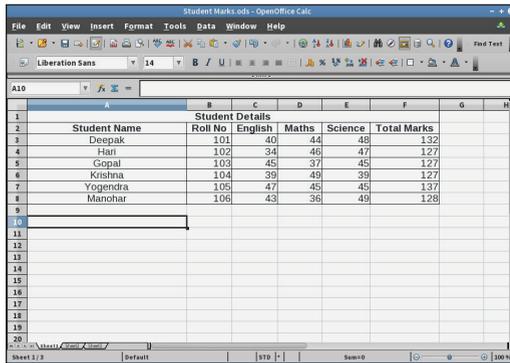


Figure 10: Using the Sum() Function

- b. To count the total number of students whose records are added in the Student Marks table, you need to type the $=\text{Count}(F3:F8)$ and press the Enter key from the keyboard. The result is shown in Figure 11:

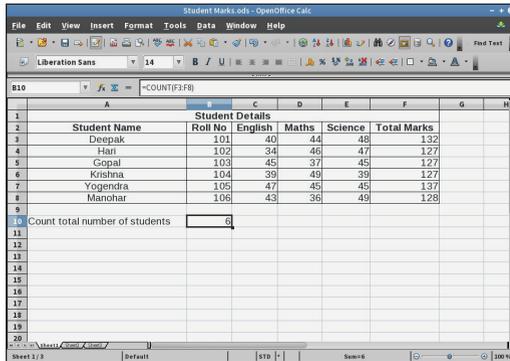


Figure 11: Counting Total Numbers of Students

- c. To find out the maximum marks in English, you need to type the $=\text{Max}(C3:C8)$ and press the Enter key from the keyboard. The result is shown in Figure 12:

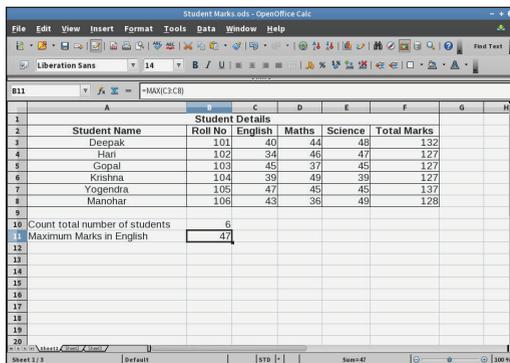


Figure 12: Displaying the Highest Marks in English

- d. To find out the minimum marks in Maths, you need to type the $=\text{Min}(D3:D8)$ and press the Enter key from the keyboard. The result is shown in Figure 13:

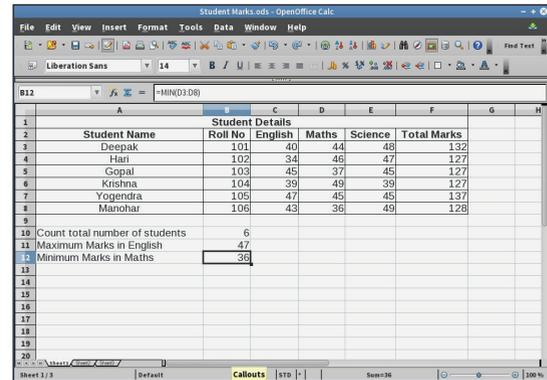
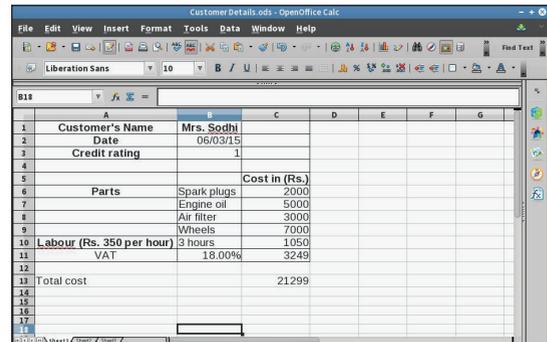


Figure 13: Displaying the Minimum Marks in Maths

3. A car mechanic maintains the details of his customers and bills in the following worksheet:



Answer the following questions based on the preceding worksheet:

- a. After creating the complete bill, the mechanic realizes that he has entered the cost of wheels incorrectly. The correct cost of wheels is ₹ 5500.00. Now complete the sentences using the words given in the list:

Cut
C9
B9
Select

Rename

The mechanic can edit the cell to enter the new cost.

- b. Which two cell values automatically change with the change in the cost of wheels?

Ans. a. C9, Select
b. C11, C13

4. a. The mechanic wants to purchase an air filter from an online store.

Write the labels in the correct order to show how the mechanic could do this.

Pay using a credit/debit card.

Go to the online store using a Web browser.

Look at the search results and select the required air filter.

Type the keywords, such as air filter, and press the search button.

- b. The mechanic is using a search engine to find an online store to purchase the air filter. Give two reasons why the mechanic should search Indian websites only.
- c. The mechanic gives customers a credit rating from 1 to 3 as per the following scale:

Pays promptly and in full on collecting the car	1
Pays within three weeks of collecting the car	2
Money still due after a month	3

A customer who pays after a month is given the same credit rating as a customer who does not pay.

Give one limitation of this code system designed in Calc.

Try to design a better coding system.

- Ans. a. Answers of the following questions are given as follows:
The following labels in the correct order are shown as follows:

- First Name
- Last Name
- Address
- Payment Mode (by credit card, debit card, and cash)

Advantages of using the credit or debit card for payments are as follows:

- You can buy the goods easily and at any time.
- You are not required to carry cash.
- You have full records of your purchase.

Disadvantages of using the credit or debit card for payment are as follows:

- You have to pay additional charges, such as annual fees and service tax.
- You have to pay amount, if your credit or debit card has been stolen and misused by other.

Searching the online stores to buy air filter in India, as shown in Figure 14:

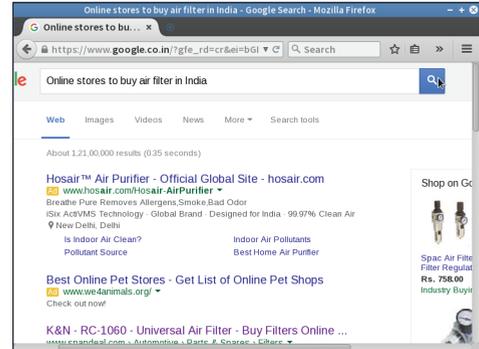


Figure 14: Searching Online Stores to Buy Air Filter

The search result is shown in Figure 15:

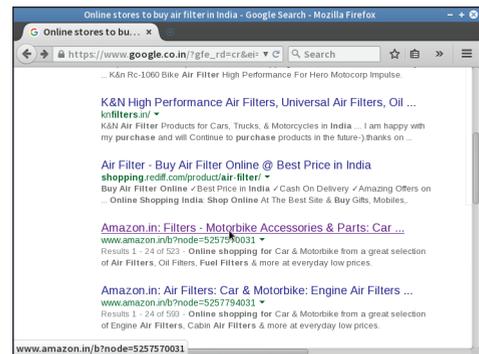


Figure 15: Displaying the Result of Searching

We click the Amazon.in: Filters – Motorbike Accessories & Parts: link. The related page is opened as shown in Figure 16:

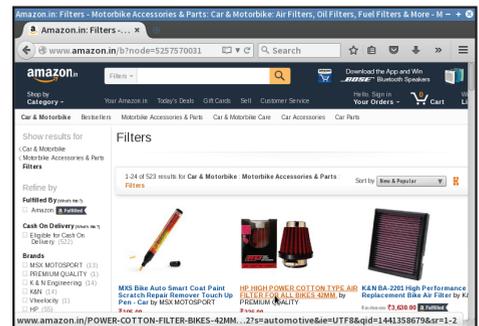


Figure 16: Opening the Selected Web Page

Click on the required product. The following Web page gets opened, as shown in Figure 17:



Figure 17: Clicking on the Required Product

- The two reasons for searching the required information on Indian websites only are as follows:
 - Fast delivery
 - Low cost because if the mechanic purchases an air filter from the foreign market, then the cost would also include import duties.

- Answers of the following questions are given as follows:
The limitation of this system is that it does not generate the correct credit rating for the customers as it always provides 3 credit ratings for the customers who pay after one month and who does not pay at all.

We modify the preceding coding system for better and correct output, which is shown as follows:

Pays promptly and in full on collecting the car	1
Pays within three weeks of collecting the car	2
Pay after a month	3
Defaulter (Payment is not made at all)	4

- An accountant uses the following worksheet to maintain sales record for an equipment shop:

Customer Details ods - OpenOffice Calc				
	A	B	C	D
1				
2	Sales	06/05/15		
3				
4	Equipment	Price	Quantity Sold	Sales Value (Rs.)
5	Drill	700	10	7000
6	Screw driver	100	30	3000
7	Jack	1000	7	7000
8	Car Battery	15000	5	75000
9				
10			Total Sales Value	92000
11				
12				
13				
14				
15				
16				

Answer the following questions based on the preceding worksheet:

- Give the label of the formula in cell D5.
- Give the label of the formula in cell D10.

- The price of the car battery has decreased to 12000.
 - How can you edit the worksheet?
 - Give the cell references that change automatically when you edit the worksheet.

- Ans.
- = (B5*C5)
 - = Sum(D5:D8)

- Perform the following steps to edit the Car Battery value:
 - Select the B8 cell
 - Type the 12000 value in the B8.
- D8 and I0

- Now, you have a fairly good knowledge of the OpenOffice Writer as well as the OpenOffice Calc. Write down three instances where the Writer is a better choice to organize data than Calc. Similarly, write down three instances where Calc is a better choice to organize data than Writer.

S	A	S	D	F	E	G	D	C	T	X	C
P	F	O	R	M	U	L	A	S	E	V	E
R	Q	I	A	L	E	W	R	T	E	L	L
E	R	W	L	G	T	K	G	F	H	W	L
A	T	F	N	L	S	C	U	W	S	Y	P
D	N	A	U	B	H	V	M	H	K	A	O
S	R	F	M	N	Y	A	E	A	R	Z	I
H	B	D	Z	U	T	D	N	P	O	S	N
E	S	G	T	Q	S	I	T	D	W	G	T
E	K	O	O	B	K	R	O	W	L	B	E
T	Z	A	D	S	W	Y	T	N	X	E	R
A	C	T	I	V	E	C	E	L	L	C	J

Find the words from the above-given word box using the following hints:

- It is a software package that is used to enter, calculate, manipulate, and analyze different sets of data.
- It contains various cells that constitute a grid of rows and columns.
- It is a collection of multiple worksheets.
- It is the intersection of a row and a column.
- It refers to the boundary of a cell and indicates the active cell.
- The cell in which you are currently working.
- It refers to the values or cell references that are passed to a function.

- h. It describes the relationship between various cells.
- i. It refers to a predefined formula that is used to perform basic or complex operations on a specified range of cells.
- j. It is a group of contiguous cells that appears like a rectangular shape.
- k. It enables you to add duplicate entries or fill data series in the cells of a worksheet.
- l. It adds all the numbers in a range of cells and the result is displayed in the active cell containing the formula.

Ans. The three instances where Writer is the best choice to organize data are:

- 1. As a student, Writer is used to create notes and articles.
- 2. In office, Writer is used to create letter and other official document.
- 3. As a scientist, Writer is used to create thesis and note down details about experiments.

The three instances where Calc is the best choice to organize data are:

- 1. In school, Calc is used to maintain students and teachers details.
- 2. In Office, Calc is used to maintain employees personal details and offices expenses details.
- 3. At home, Calc is used to maintain daily expenses details.

The words from the above-given word box are as follows:

- a. Calc
- b. Spreadsheet
- c. Workbook
- d. Cell
- e. Cell Pointer
- f. Current or Active Cell
- g. Arguments
- h. Formula
- i. Function
- j. Range
- k. Fill handle
- l. SUM