

CCA-101: Fundamentals of IT and Programming

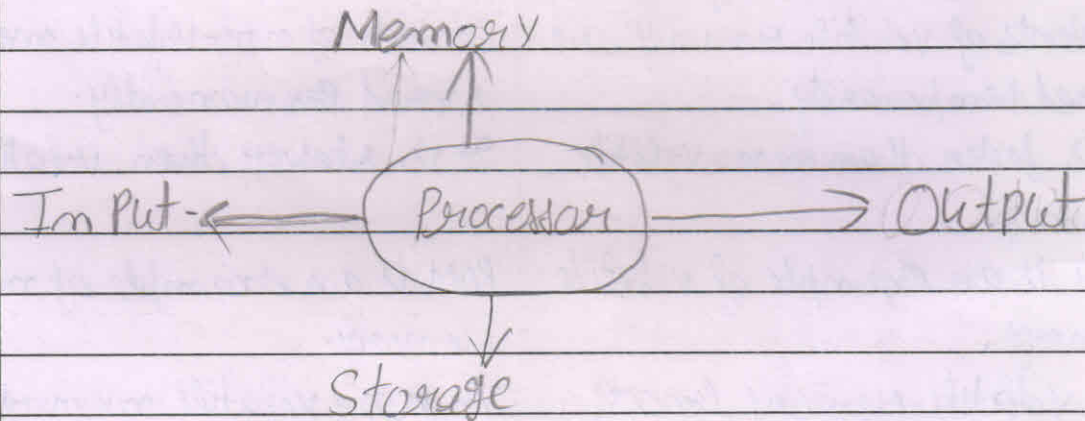
Assignment - 1

Date :/...../.....
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XTRA
EDGE

Q(1) What are the four fundamental parts of computer? Explain it with the help of diagram.

Ans. A computer is an electronic machine that accepts data from the user as an input, process the data by performing calculations and operations on it with help of CPU and generates the desired result as an output. The term computer is derived from the Latin word *computare*, which means of computer.



Q(2) Discuss about the classification of computers based on size and capacity?

Ans. (1) Super computer
(2) Mainframe computer
(3) Mini computer
(4) Micro computer

Q(3) What is the meaning of computer generation? How many computer Generations are defined? What technologies were / are used?

Ans. Computer generation are based on when major technological changes in computer occurred, like the use of vacuum tubes, transistors and the microprocessor. As of 2020 There are five generation of the computer.

- (1) First Generation 1940-1956
- (2) Second Generation 1956-1963
- (3) Third Generation 1964-1971
- (4) Fourth Generation 1971-2010
- (5) Fifth Generation 2010 to Present

Q (4) Differentiate between volatile and non-volatile memories?

Ans.

Volatile Memory

Non-Volatile memory

- | | |
|---|---|
| (1) contents of volatile Memory are stored temporarily. | contents of non-volatile memory are stored permanently. |
| (2) It is faster than non-volatile memory. | It is slower than volatile memory. |
| (3) RAM is an example of volatile memory. | ROM is an example of non-volatile memory. |
| (4) In volatile memory, process can read and write. | In non-volatile memory, process can only read. |
| (5) Volatile memory is more costly per unit size. | non-volatile memory is less costly per unit size. |

Q (5) Distinguish among system software, application software, and open source software on the basis of their features.

Ans. System software :-

- (1) High speed.
- (2) Hard to manipulate
- (3) Written in a low-level computer language
- (4) It is close to the system
- (5) Versatile.

Features of Application Software

- Written in a high-level programming language.
- Easy to design.
- More interactive
- Bigger in size
- ~~But~~ Performs specialized tasks such as photo editing word processing.
- Needs more storage space because of its size.

Features of open source software.

- Lesser hardware costs
- No vendor lock-in
- Integrated management
- Simple license management
- Lower software costs.

Q(6) Create a file in MS Word to insert a paragraph about Yourself and save it with file name "yourself". Describe all steps involved it.

As. (a) click the file tab.

- click save As.
- choose a file location, such as one Drive or This PC to store your file.
- In the File name box, enter a new for the file.
- In the save as type list, click the file format that you want to save the file in. For example, click Rich Text format.
- click Save

Q6(b) Write steps regarding followings.

To change the font style.

- Select the text you want to modify.
- Select the Home tab and locate the font group.
- Click the drop-down arrow next to font style box.
- Font style menu appears.
- With a left click select the desired font style.

To change the font size.

- Select the text or cells with text you want to change.
- To select all text in word document, Press Ctrl + A
- On the Home tab, click the font size in Font size box.
- You can also type in any size you want, within the following limits.

To change the font color.

- Select the text you want to modify.
- In Home tab locate the font group.
- Click the drop-down arrow next to font color button.
- Font color menu appears.
- Select the desired font color with a left click.
- Word will change the font color of the selected text.

To highlight (in yellow) the line that reads "needs to get TMS's address".

- Select the text that you want to highlight.
- On the Home tab, select the arrow next to Text Highlight color.
- Choose a color. The text you selected will be highlighted in the color you chose.

Q(1) creat a file in MS word for the following document and save it with file name 'MS - word'. Describe all steps involved in it.

Create a document:

- 1 Open word, or if word is already open select file > New
- (2) In the search for online templates box, enter a search word like letter, resume or invoice. or select a category Under the search box like Business, Personal or Education.
- (3) click a template to see a preview.
- (4) Select Create.

Save a file

- (1) St select save. or select file > Save As.
- (2) Select where you want to save the file. You can save to your computer, one drive or another location. Save your files to One Drive if you'd like to get to them anywhere - on your computer tablet, or phone.
- (3) Enter a meaningful, descriptive file name.
- (4) A select save.

Q(10)

creat a file in MS Word to insert a table in the document Describe all steps involved in it ?.

- (1) Place your insertion point in the document where you want the table to appear.
- (2) Select the insert tab.
- (3) click the table command.
- (4) Hover your mouse over the diagram ~~2~~ squares to select the number of columns and rows in the table.
- (5) click your mouse and the table appears in the document.

- (13) (a) Describe various steps involved in the following.
- To modify column width of a worksheet.
- (1) Select the column or columns that you want to change.
 - (2) On the Home tab, in the cells group, click format.
 - (3) Under cell size, click column width.
 - (4) In the column width box, type the value that you want.
 - (5) Click Ok.

- To modify the row height of a worksheet.
- Position the cursor over the row line so the cursor becomes a double arrow.
 - Click and drag the mouse to increase or decrease the row height.
 - Release the mouse. The height of the selected row will be changed.

- The delete rows and columns of a worksheet
- Column : Select any cell within the column then go to Home > Insert > Insert sheet columns or Delete sheet columns.
- Alternatively, right-click the top of the column and then select Insert or Delete.
- Row : Select any cell within the row then go to Home > Insert > Insert sheet rows or Delete sheet rows.
- Alternatively, right-click the row number and then select Insert or Delete.

(13/6) Describe following terms in the worksheet

- # Absolut Absolute reference and relative reference in formula.
- # Absolute reference are used when you want to fix a cell location. These cell references are preceded by a dollar sign. By doing this you are fixing the value of a particular cell reference. For example, if you type the formula $=A1+A2$ into A3 and copy it to another location B3 the formula will change to $=B1+B2$.
- # Relative Reference :- This is the most widely used type of cell reference in formulas. Relative cell references are basic cell references that adjust and change when copied or when using Auto Fill. Example. $=\text{Sum}(B5:B8)$, as shown below changes to $=\text{Sum}(C5:C8)$ when copied across to the next cell.
- # Cell Address :- All our A cell reference also renowned as a cell address is a work sheet to identify a single cell. Each cell reference starts with a letter and comes to an end with a number.

(14) a) What tools are available to ~~can~~ customize our Power Point ~~per~~ presentation?

- Q. tools :-
- | | |
|--------------------------|-----------------------|
| (1) Templates and themes | (10) Tables |
| (2) Slide layouts | (11) Flowcharts |
| (3) Fonts | (12) Icon charts |
| (4) Colors Themes | (13) Radials |
| (5) Icons | (14) Progress Bars |
| (6) Shapes | (15) Animation |
| (7) Stock Photos | (16) Transitions |
| (8) Charts and Graphs | (17) Interactivity. |
| (9) Maps | (18) Audio and video. |

14(b) Write the steps for the following action for creation of Power ~~per~~ Presentation

- Open a Blank Presentation.
- (1) Open Powerpoint
 - (2) In the left pane, select New.
 - (3) Select an option:
 - To create a presentation from scratch, select Blank Presentation.
 - To use a prepared design, select one of the templates.
 - To see tips for using Power point, select Take a Tour and select create.

Save the Presentation as Lab 1.pptx.

- (1) Open the Presentation in Powerpoint.
- (2) On the File tab, click Save As.
- (3) In the Save As dialog box, in the save as type list, click Powerpoint Presentation (*pptx)
- (4) click Save.

- # Add a title to the first slide : The name of your collage.
- Select the slide whose layout you will change so that it can have a title.
 - click Home → layout.
 - If select title slide for a standalone title page or select title and content for a slide that contains a title and a full slide text box.
 - select the click to add title text box.

- # Type your first name and last name in the subtitle section.

- # Add a new slide which has a title and content.
- (1) Select the slide whose layout you will change so that it can have a title.
 - 2 click Home → layout.
 - 3) Select title slide for a standalone title page or select title and a full slide text box.
 - (4) select the click to Add title text box.

(15) write steps for creation of a set of Powerpoint slides that demonstrates you skill to use the tools of Powerpoint. It should include the following things.

- The title slide and Bullet list.

Title slide Power Point:

Click Home > layout. It select the title slide for a standalone title page or select title and content for a slide that contains a title and a full slide text box. Many other layout options include titles, too. Pick the one that is best suited for your presentation. Select the click to add title text box.

Bullet list :

- (i) Choose Insert > New slide, click the new slide button on the toolbar, or press the hotkey Ctrl+M.
- 2) From the slide layout task pane choose the Bulleted list layout. (Figure 2-8)
- (3) Click the title placeholder and type the title of your Bulleted list.
- (4) Click the text placeholder and type your bulleted text.

#

Inserting excel sheet.

- Select the New sheet plus icon  at the bottom of the workbook.
- Or select Home > Insert > Insert sheet.

~~Clip~~ Clip art and text

- (i) Open the Powerpoint. Open the Powerpoint and goto

"Insert" → of online pictures

Text

(2) Select the clip Art

1) Select a shape or a connector

2. Type in the text

(3) Insert the clip Art.

3) Select a blank area on the drawing page.

(4) Select the image in the PDF File.

(5) Edit the image.

(6) Add image to PDF.

Slide show effects.

(1) Select the slide to which you want to apply the effect.

(2) Select the Animation tab.

(3) In Transition to this slide group you will see the transition effects.

(4) Click the drop-down arrow to see menu of transition effects.

(5) Select the desired transition effect.

Part - 2

Q(16) What is the difference between Machine language and High level language?

1) High-level language

(Machine language.)

Low-level language.

1) High-level language is a human-friendly language that is easy to learn and understand.

Low-level language are quite challenging for human to learn and understand.

(2) They are executed at a slower speed as they require a translator program.

This language can execute at high speed.

3) These language allow much more abstraction.

These languages have negligible abstraction.

(4) No need for hardware knowledge for writing programs.

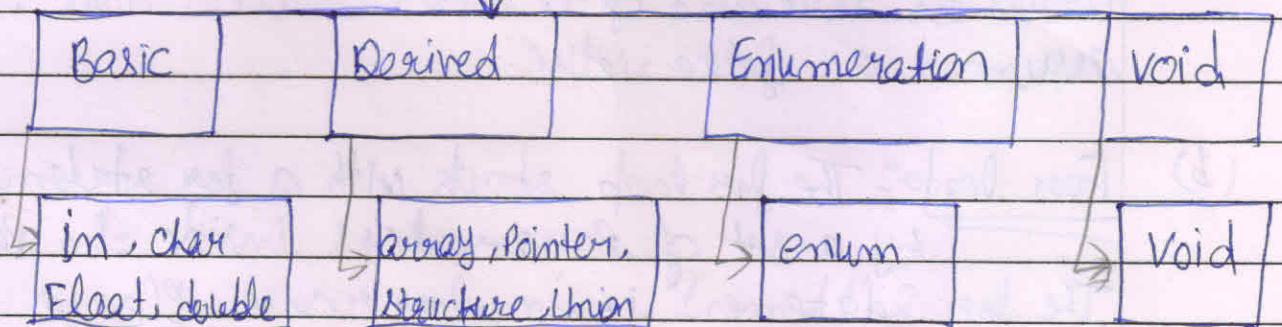
Hardware knowledge is necessary for writing programs.

(5) Programming, these language are very common and widely used nowadays.

For programming these languages are not very common nowadays.

Q(17) Discuss about different data types of C programming language.

Data Types in C



(Q18) Find the output of the following expressions.

- (a) $X = 20 / 5 * 8 + 30 - 5$ (b) $Y = 30 - (40 / 10 + 6) + 10$ (c) $Z = 40 * 2 / 10 - 2 + 10$

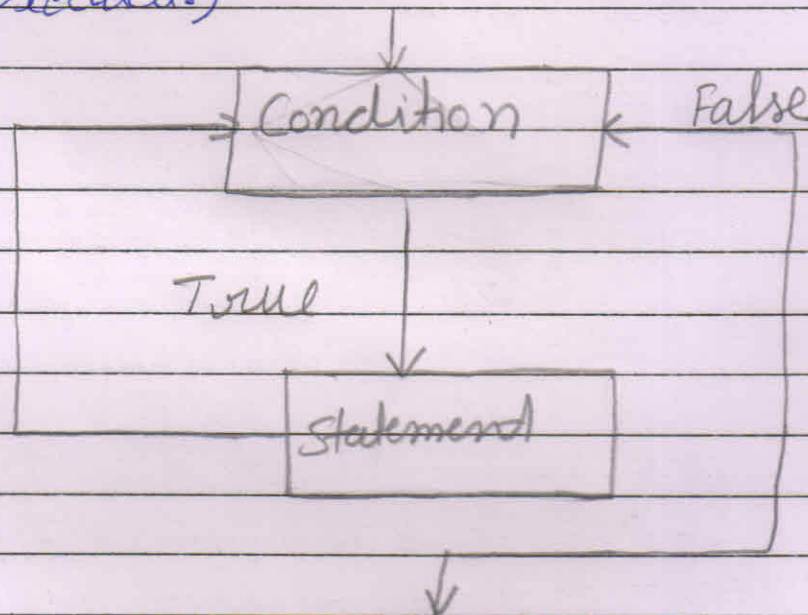
(Q19) Describe the syntax of the following ~~program~~ statements.
(a) If-else statement (b) for loop (c) while loop (d) Do-while loop.

If-else statement :- Syntax If the Boolean expression evaluates to true, then the if block will be executed, otherwise, the else block will be executed. C Programming language assumes any non-zero and non-null values as true and if it is either zero or null, then it is assumed as false value.

(b) For loop :- The for loop starts with a for statement followed by a set of parameters inside the parenthesis. The for statement is in lowercase. Please note that

this is case sensitive, which means the for command always has to be in lower case in C Programming language.

While loop : The syntax of while loop in c language is given below. while (Condition) { //code to be executed. }



Do while loop : Here is the basic syntax for a do while loop. do { //body of the loop } while (Condition); Note that the last test of the termination condition is made after each execution of the loop. This means that the loop will always be executed at least once even if the condition is false in the beginning.