

CCA-101: Fundamentals of IT and Programming

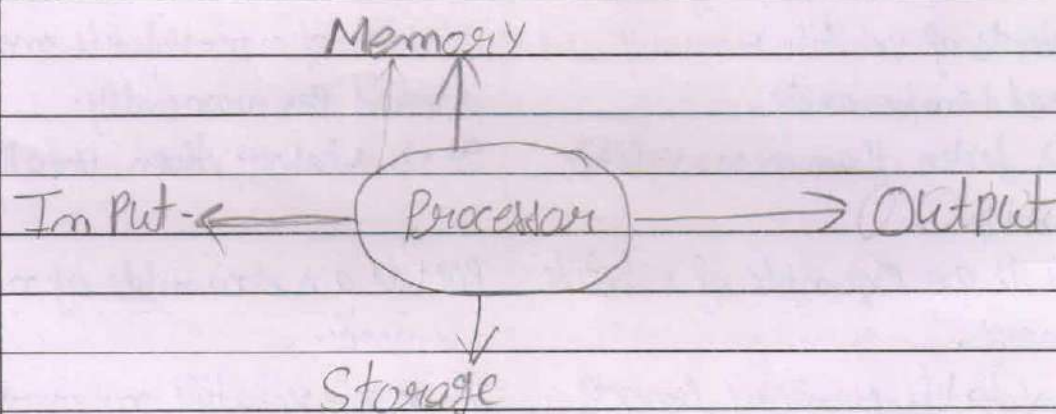
Assignment - 1

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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, processes the data by performing calculations and operations on it with the 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 generations are based on when major technological changes in computers occurred, like the use of vacuum tubes, transistors and the microprocessor. As of 2020, there are five generations 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

- | | |
|--|---|
| <ol style="list-style-type: none"> (1) contents of volatile Memory are stored temporarily. (2) It is faster than non-volatile memory. (3) RAM is an example of volatile memory. (4) In volatile memory, process can read and write. (5) Volatile memory is more costly per unit size. | <ol style="list-style-type: none"> contents of non-volatile memory are stored permanently. It is slower than volatile memory. ROM is an example of non-volatile memory. In non-volatile memory, process can only read. 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) 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.

Q6) Create a file in MS Word to insert a paragraph about yourself and save it with file name "yourself". Describe all steps involved in it.

Ans. @ click the file tab.

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

Q6.a) Create a file in MS-word to insert a paragraph about yourself and save it with file name “ yourself”. Describe all steps involved in it.

My name is Ramandeep Kaur. My father name is Gurvir Singh. My mother name is Bhupinder Kaur. I live in jalal . I am 25 years old. My qualification 10th,12th, B.A and B.ed. My hobbies are reading books. I have many friends but Jaswinder Kaur is my best friend. I getup early morning. My favourite colour skyblue. I love to study storybooks as a pastime. I am also learning cycling so that I can keep myself healthy.I love to dance. I am also very found of watching various movies .My father is a farmer. My mother is a housewife. In the end I would like to say that I want to spot my family.

Q6b) write steps regarding followings .

➤ To chang the font style

1. Click Format > Text Styles.
2. In the Item to Change list, click All, then select the font, size, or color you want for all text in the current view. ...
3. Repeat this process for other views.

➤ To change the font size

1. Select the text or cells with text you want to change. To select all text in a Word document, press Ctrl + A.
2. On the Home tab, click the font size in the Font Size box.

➤ To change the font color

1. Select the text that you want to change. **On the Home tab, in the Font group, choose the arrow next to Font Color, and then select a color.**

➤ **To highlight(in yellow) the line that reads “ needs” need to get IMS,s address”.**

Click the Home tab. In the Font group, click the Text Highlight button. Word is now in Highlighting mode. Drag the mouse over the text you want to highlight.

Q7. Create a file in Ms-word for the following document and save it with file name 'Ms-word'. Describe all steps involved in it.

MS WORD

Ms word is a widely used commercial word processor developed by Microsoft .

Ms word is application software , which is capable of

Creating ,

Editing ,

Saving , and

Printing any type of document

Q8.Create a file in MS-Word for the following document and save it with file name 'equations'. Describe

All steps involved in it.

Equations

$$X^2 + Y^5 = 30$$

$$Z^3 + Q^4 = 50$$

$$A^2 + B^8 = X^2 + Y^8$$

Q9.Create a file in MS-word that convert existing highlight text to table as shown below and save it as file name 'text_ to _ table '. Describe all steps involved in it.

Select the text you want to convert.

Select the Insert tab.

Click on Table command. A dialog box appears.

Click on Convert Text to Table, a new dialog box appear here set number of columns.

Click on Ok Finally selected text convert in a table.



Select the text you want to convert.	Select the Insert tab.
Click on Table command. A dialog box appears.	Click on Convert Text to Table, a new dialog box appear here set number of columns.
Click on Ok Finally selected text convert in a table.	

Q10. Create a file in Ms –word to insert a table in the document.
Describe all steps involved in it.

1. Click insert> table and move the cursor over
2. The grid until you highlight the number of columns and rows you want.
3. Then select ok.

CALCUATE THE FOLLOWING THINGS OF RANGE (C2:C11) OF DATA IN THE WORKSHEET CREATED IN QUE

	Name	Marks	THE SUM RANGE CELLS(C3:C12)
1	n1	60	654
2	n2	70	average the range of cells(C3:c12)65.4
3	n3	80	highest marks in na range of cells(C3:C12)90
4	n4	90	minimum marks in a range of cells(C3:C12)40
5	n5	40	
6	n6	50	
7	n7	77	
8	n8	44	
9	n9	88	
10	n10	55	
			654
			65.4
			90
			40

QUESTION 10.

90

40

- (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

- # ~~Absol~~ 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 over 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.

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

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

14(b) Write the steps for the following action for creation of Power 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 Powerpoint, 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.

GURU KASHI UNIVERSITY

Talwandi Sabo.Bti

Ramandeep kaur

About my self

- My name is Ramandeep kaur.
- My father name is Gurvir singh.
- My mother name is Bhupinder kaur.
- I live in Jalal.distt. Bti.

(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.

(c) 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 art and text

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

Part - 2

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

→ High-level language

(Machine language.)

Low-level language.

i) 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.

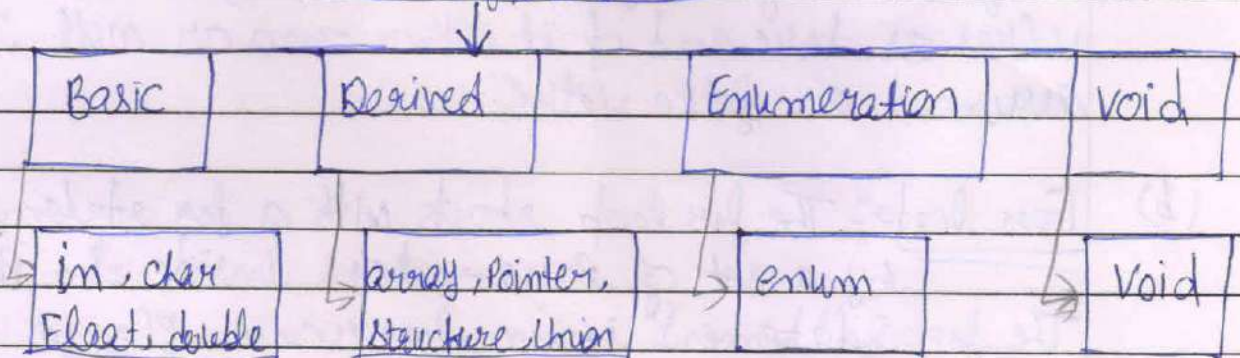
Hardware knowledge is necessary for writing programs.

(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



Part - 2

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

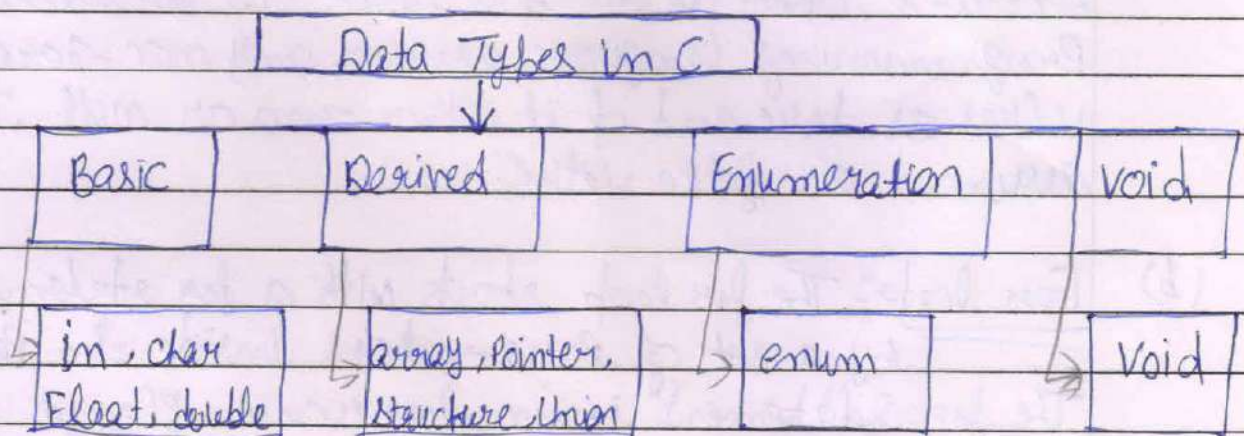
→ High-level language

(Machine language.)

Low-level language.

- | | |
|--|--|
| <p>i) High-level language is a human-Friendly language that is easy to learn and understand.</p> <p>(2) They are executed at a slower speed as they require a translator program.</p> <p>3) These language allow much more abstraction.</p> <p>(4) No need for hardware knowledge for writing programs.</p> <p>(5) Programming, these language are very common and widely used nowadays.</p> | <p>Low-level language are quite challenging for human to learn and understand.</p> <p>This language can execute at high speed.</p> <p>These languages have negligible abstraction.</p> <p>Hardware knowledge is necessary for writing programs.</p> <p>For programming these languages are not very common nowadays.</p> |
|--|--|

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



Q19. Describe the syntax of the following statements

a) If –else statement

```
if (condition) {  
    // block of code to be executed if the condition is true  
}
```

The **else** statement specifies a block of code to be executed if the condition is false:

```
if (condition) {  
    // block of code to be executed if the condition is true  
} else {  
    // block of code to be executed if the condition is false  
}
```

The **else if** statement specifies a new condition if the first condition is false:

```
if (condition1) {  
    // block of code to be executed if condition1 is true  
} else if (condition2) {  
    // block of code to be executed if the condition1 is false and  
    condition2 is true  
} else {  
    // block of code to be executed if the condition1 is false and  
    condition2 is false  
}
```

b) for loop

```
#include <stdio.h>  
  
int main () {  
  
    int a;  
  
    /* for loop execution */  
    for( a = 10; a < 20; a = a + 1 ){  
        printf("value of a: %d\n", a);  
    }  
  
    return 0;  
}
```

c) while loop

```
#include <stdio.h>  
  
int main () {  
  
    /* local variable definition */  
    int a = 10;  
  
    /* while loop execution */  
    while( a < 20 ) {  
        printf("value of a: %d\n", a);  
    }  
}
```

```
    a++;  
}  
  
return 0;  
}
```

d) do-while loop

```
#include <stdio.h>  
  
int main () {  
  
    /* local variable definition */  
    int a = 10;  
  
    /* do loop execution */  
    do {  
        printf("value of a: %d\n", a);  
        a = a + 1;  
    } while( a < 20 );  
  
    return 0;  
}
```


Q. 20. Find the output of the following program segments.

Segment (A)

main.c	Output
<pre>1 #include<stdio.h> 2 int main() 3 { 4 int i; 5 for (i=1;i<2;i++) 6 { 7 printf("IMS Ghaziabad\n"); 8 } 9 }</pre>	<pre>/tmp/T5xG0XeCl0.o IMS Ghaziabad </pre>

Segment (B)

main.c	Output
<pre>1 #include<stdio.h> 2 int main() 3 { 4 int i =1; 5 while(i <=2) 6 { 7 printf("IMS Ghaziabad\n"); 8 i = i+1; 9 } 10 }</pre>	<pre>/tmp/T5xG0XeCl0.o IMS Ghaziabad IMS Ghaziabad </pre>

Segment (C)

main.c	Output
<pre>1 #include<stdio.h> 2 void main() 3 { 4 int a =10,b=100; 5 if(a>b) 6 printf("largest number is%d\n",a);else 7 printf("largest number is%d\n",b); 8 }</pre>	<pre>/tmp/T5xG0XeCl0.o largest number is100 </pre>