

CCA

Assignment - 1

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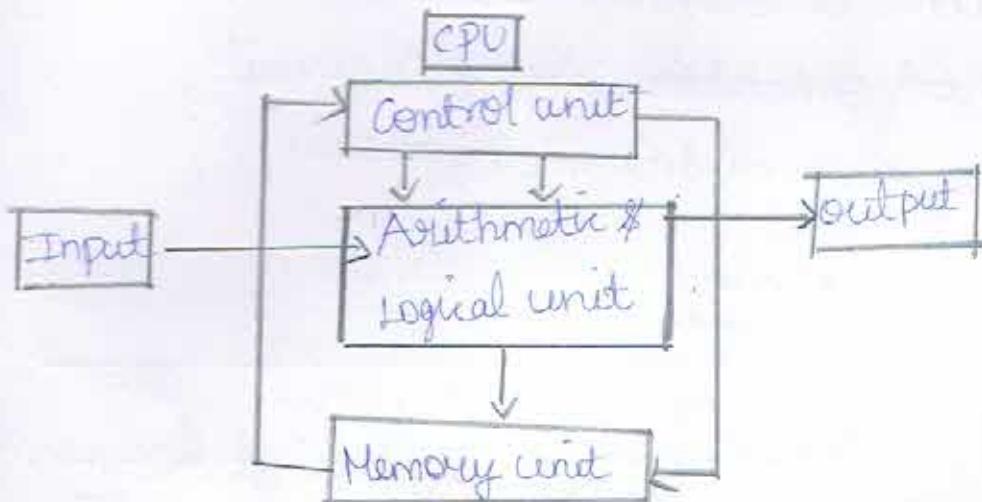
course : CCA

# CCA-101 : Fundamentals of IT & Programming

## Assignment - 1

1) Few fundamental parts of computer & diagram.

- ⇒ Memory unit
- ⇒ control unit
- ⇒ Arithmetic unit
- ⇒ logical unit



2) Classification of computers:-

- there are four types in the classifications

- ⇒ Super Computer
- ⇒ mainframe computer
- ⇒ mini computer
- ⇒ micro computer

3) What is the meaning of computer generation? Technologies are used?

- ⇒ First Generation Computer - 1942 - 1955
- ⇒ Second Generation Computer - 1955 - 1964
- ⇒ Third Generation Computer - 1964 - 1975
- ⇒ Fourth Generation Computer - 1975 - 1980
- ⇒ Fifth Generation Computers (Present and Beyond)

### Technologies -

1942 - 1955 First generation Vacuum Tubes

1955 - 1964 Second generation Transistors

1960 - 1975 Third generation Integrated Circuits

1975 - 1980 Fourth generation microprocessors

### A/D & B/Volatile & Non-volatile Memory :-

Volatile Memory	Non-Volatile Memory
Computer memory that requires constant power to maintain the stored information	Computer memory that can store information even there is no constant power.
Holds data temporarily	Holds data permanently
Faster	Slower

5) Distinguish among system software, application software and open source software on the basis of features?

System software:-

Type of computer program that is designed to own a computer's hardware and application program.

Features:-

- ⇒ High speed
- ⇒ Hard to manipulate
- ⇒ Low-level computer language
- ⇒ Versatile

Application software:-

computer software developed specifically to aid a user to perform any specific tasks.

Features:-

- Easy to design
- Bigger in size

Open source software:-

code that is designed to be publically accessible.

Features:-

- ⇒ Integrity
- ⇒ Innovation
- ⇒ Final thoughts

b) To change the font style:-

To select all text in a word document, press **Ctrl + A**. Open the font dialog box & select the font style.

To change the font size:-

To select all text in a word document, press **Ctrl + A**. Open the font dialog box & select the font size.

To change the font color:-

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

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

To highlight a single line move your cursor to the start of the line you want to highlight, hold down a Shift key on your keyboard with the Shift key held down, press the End key on your keyboard. A single line is highlighted.

f) Create a file in Ms. Word for the following document.

opening Ms word

⇒ click the start icon

⇒ then point to All programs

⇒ Then click Microsoft Office and  
⇒ Then click Microsoft Word.

### Creating

⇒ Open Word

⇒ In the search for online templates box, enter a search word like Letter, resume  
⇒ Click a template to see a preview  
⇒ Select Create

### Editing:

⇒ In the upper-right corner, select Edit Document > Edit.

### Saving

⇒ Click File > Save, pic or browse to a folder, type a name for your document in file document name box & click Save.

### Printing any types of document

⇒ Select File > Print

⇒ To preview each page, select the forward and back ward arrows at the bottom of the page.

⇒ If the text is too small to read, use the zoom slider at the bottom of the page to enlarge it.

### 3) Equations:

$$x_2^2 + y_5 = 30$$

$$z^3 + b^4 = 50$$

$$a_2 + b^8 = x_2 + y_8$$

Select Insert > equation or press Alt+= To use a built-in formula, select Design > equations.

⇒ click file > save, pick or browse to a folder type a file name 'equations' in the filename box, and click save.

- 9) create a style in MS-word that convert existing highlighted text to table as shown below.

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 appears.

here set number of columns

click on OK finally selected text convert in a ta

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 appears
Here set number of columns	click on OK finally selected text converted in a table.
=> Select the text that you want to convert, and then click insert > Table > Convert text to table. In the Convert text to table box, choose the options you want. Under table size, make sure the numbers match the numbers of columns and rows you want.	

v) create a file in Ms-word to insert a table in the document. describe all steps involved in it?

=> place your insertion point in the document where you want the table to appear.

=> Select the Insert tab

=> click the Table command

=> Drag your mouse over the diagram squares to

=> Select the number of columns and rows in the table.

1) Create a following worksheet in MS-Excel and save it with name 'book1'.

A	B	C
ROLL NO	NAME	MARKS
1	n <sub>1</sub>	60
2	n <sub>2</sub>	70
3	n <sub>3</sub>	80
4	n <sub>4</sub>	90
5	n <sub>5</sub>	40
6	n <sub>6</sub>	50
7	n <sub>7</sub>	77
8	n <sub>8</sub>	44
9	n <sub>9</sub>	88
10	n <sub>10</sub>	55

⇒ click File > Save As

⇒ under save as, pick the place where you want to save your work book.

⇒ click Browse to find the location you want in your Document folder.

⇒ In the file name box, and save name 'book1' in Excel sheet.

⇒ click Save.

2) calculate the following things of a orange ((2-11) ref data in the worksheet created in question no 10).

A	B	C
Reg NO	Name	Marks
1	n1	60
2	n2	70
3	n3	80
4	n4	90
5	n5	40
6	n6	50
7	n7	77
8	n8	44
9	n9	88
10	n10	55

The sum of the marks using autosum in a range of cells  
 ((2:11))

654

The average of the marks in a range of cells ((2:11))

65.4

Highest marks in a range of cells ((2:11))

90

minimum marks in a range of cells ((2:11))

40

13) a) To modify column width of a worksheet.  
⇒ Select a column or a range of columns on the Home tab, select Format > column width. Type the column width and select OK.

To modify the row height of a worksheet.  
⇒ To change the height of one row, drag the lower boundary of the row heading until the row is set to the desired height.

To delete rows and columns of a worksheet  
⇒ To delete one cell, choose Shift cells left or shift cells right or Shift cells up to delete the row, click Delete entire row, to delete the column, click Delete entire column.

b) Absolute reference and relative reference in formula.  
Original cell reference when you copy it, you lock it by putting a dollar sign (\$) before the cell and column reference. Ex: Copy the formula = \$A\$2 + \$B\$2 from C2 to D2

Cell Address:  
use the ADDRESS function to obtain the address of a cell in a worksheet, given specified row and column numbers.

Ex: Address [ADDRESS] (2,3) returns \$C\$2.

a) what tools are available to customize our power point presentation.

⇒ The Home tab holds the cut and paste features font and paragraph options, and what you need to add the organize slides.

⇒ Design

⇒ Transitions

⇒ Animation

⇒ Sound

⇒ Slide show

⇒ Review

⇒ View

write the steps for the following action of power point presentation?

In a Blank presentation

⇒ Open a power point

⇒ In the left pane, select new

⇒ To create a presentation from scratch, Select Blank presentation To use a prepared design select one of the templates

The presentation as lab1.pptx.

⇒ click File > save, pick or because its a folder, type a name for your presentation (eg : lab1.pptx) and click save.

Add a title to the first slide: the name of your slides.

⇒ Go to the "Home" tab and click "Layout" then "Title only" then place your cursor in the "click to add title box on slide". Type your first name and last name in the Subtitle section.

"click to add subtitle" are first name Subasri and last name Subasri - s in the Subtitle section.

Add a new slide which has a title and content.

⇒ press ctrl+m. The title and content slide layout contains placeholders for a title, a bullet list, image and illustrations.

15) write steps for creation of a set of power point slides that demonstrates your.

Title slide & Bullet size:-

To add a slide title to an existing slide go to the "Home" tab and click "Layout" then "Title only" then place your cursor in the "click to add title".

on the HOME tab, in the paragraph click the Bullet  
on and add bullets to your power point slide.

click on the column button and add the number of  
columns and add the spacing click ok.

### Inserting Excel Sheet

⇒ In the power point, on the insert tab, click or tap  
object.

⇒ In the insert object dialog box, select Create from  
file - ⇒ click or tap browse, and in the browse box find  
an excel workbook with the data you want to insert and link to.

### Insert and Text

⇒ click the insert tab

⇒ In illustrations group click on the picture button

⇒ Insert picture dialogue box appears

### Add Show Effects

⇒ Select the object or text you want to animate

⇒ Select animation and choose an animation

⇒ Select effect options and choose an effect.

16) What is the difference between machine language and High level language?

Machine Language	High Level Language
A computer programming language consisting of binary instructions which a computer can respond to directly.  Machine language is a collection of binary digits or bits that the computer reads.  Ex: 01001000, 01100101, 01101100, 01101100-	A high-level is a programming language that enables development of a program in a much more user-friendly programming context. High level languages are grouped in two categories based on execution model Compiled or Interpreted languages. Ex: C, C++, Java

17) Different data types of c programming language.

The data type in C defines the amount of storage allocated to variables, the values that they can accept and the operation that can be performed on those variables.

C is rich in datatype.

There are three classes of data-type

- ⇒ primary datatype
- ⇒ Derived datatype
- ⇒ user defined datatype

Different data type in c language

- ⇒ floating-point
- ⇒ Integer
- ⇒ Double
- ⇒ character

Floating point

A datatype which is used to represent the floating point numbers.

integer It is represented by the int keyword and it can be either signed or unsigned.

Double It helps in storing high-precision sorts of floating point numbers of data in the computer memory.

character.  
Two types one is signed data type and second one is unsigned data type. Both data type occupy only one byte of memory.

18) Find the output of the following expression.

a)  $x = 20 / 5 * 2 + 30 - 5$

$x = 33$

b)  $y = 30 - (40 / 10 + 6) * 10$

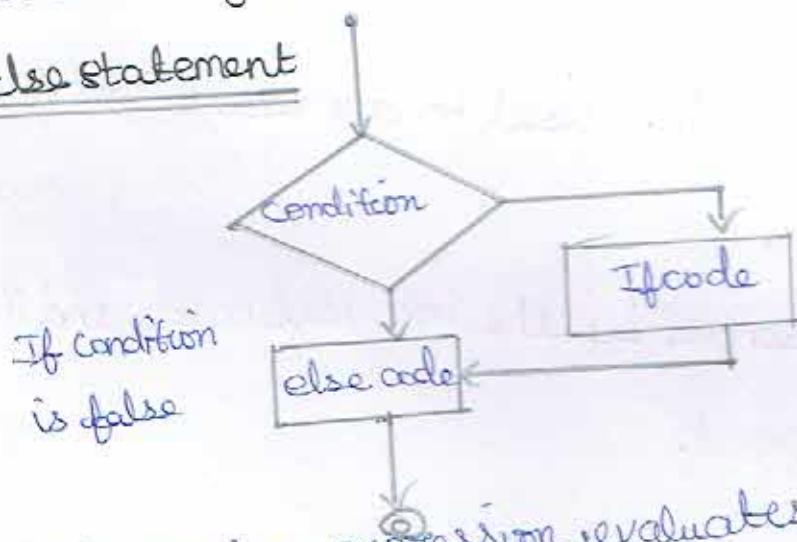
$y = -10$

c)  $z = 40 * 2 / 10 - 2 * 10$

$z = 16$

19) Describe the syntax of the following expressions.

a) If-else statement



If the Boolean expression evaluates to `true`, then the if block will be executed, otherwise, the else block will be executed.

b) for loop

`for (expression1; expression2; expression3)`

{

single statement

or  
Block of statement

c) while loop :-

while (expression)

{

single statement

or

Block statement

}

while (condition)

{ conditional code

{

if condition  
is true

if condition  
is false

Code Block



d) do-while Loop :

do

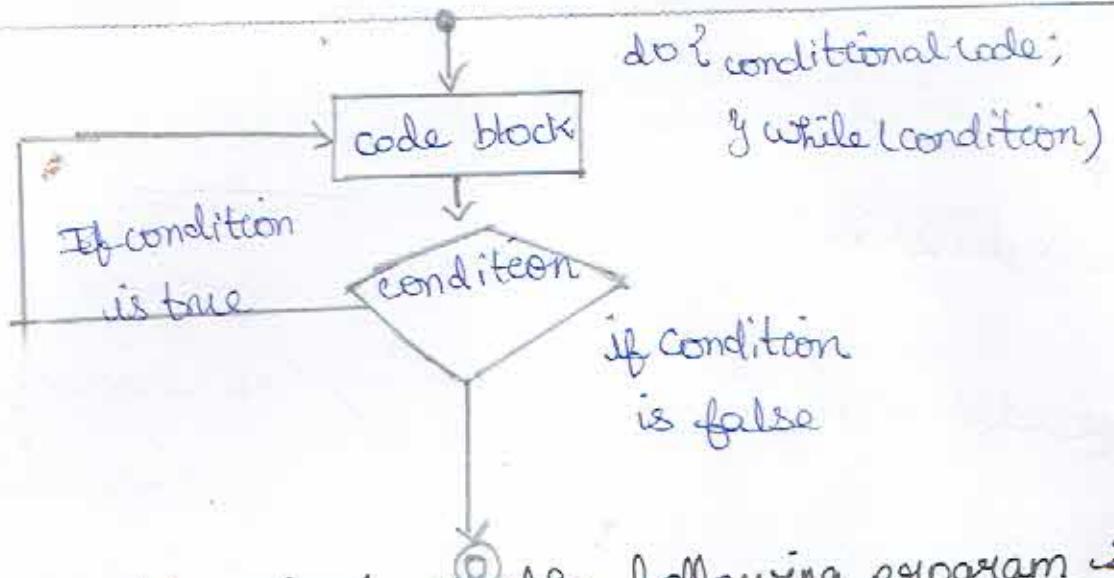
{

single statement

or

Block of statement ;

} while (expression);



20) find the output of the following program segments.

a) #include <stdio.h>  
int main ()  
{  
int i;  
for (i=1; i<2; i++)  
{  
printf ("IMS Ghaziabad\n");  
}  
}

Output  
IMS Ghaziabad

b) #include <stdio.h>  
int main ()  
{  
int i=1;  
while (i<=2)  
{  
printf ("IMS Ghaziabad\n");
}

i = i + 1;

y

y

Output:

IMS Ghaziabad

IMS Ghaziabad

c) #include <stdio.h>

void main(c)

{ int a = 10, b = 100;

if (a > b)

print f ("largest number is %d \n", a);

else

print f ("largest number is %d \n", b);

y

Output:

Largest number is 100