ASSIGNMENT

Course: Certificate in Computer Application

Course Code: CCA-101

Topic: Fundamentals of IT & Programming

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CCA - 101 : Fundamental of IT And Programming

ASSIGNMENT- 1

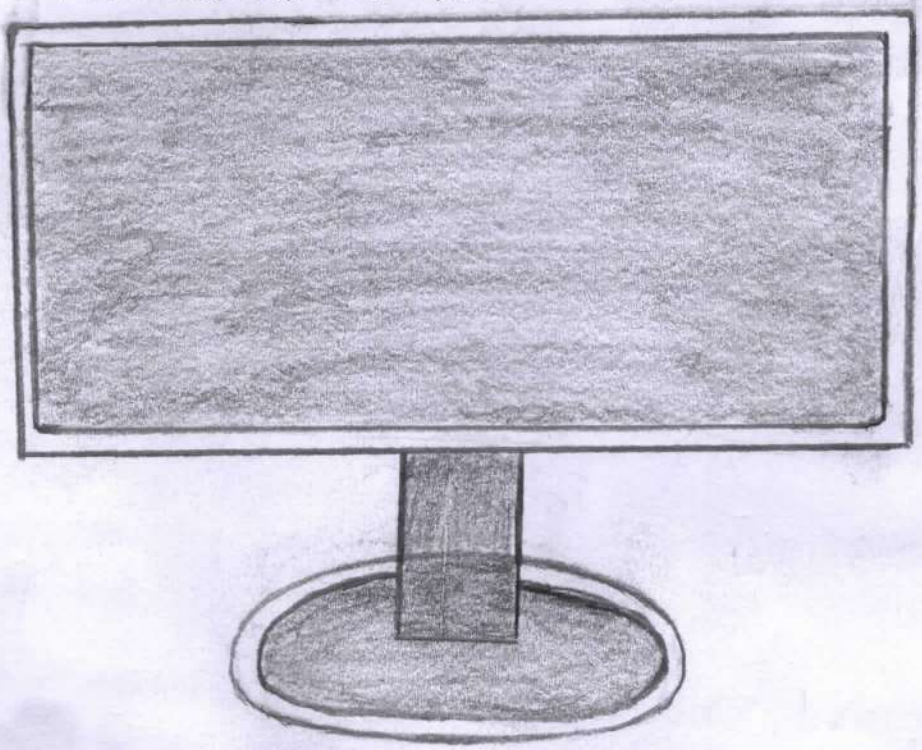
Q1 What are the four fundamental Part of Computer? Explain it with the help of diagram.

Ans The four fundamental Part of computer are :

1) Monitor
2) Mouse
3) CPU
4) Keyboard.

Monitor.

A monitor is an output device that displays information in pictorial or textual. A discrete monitor comprises a visual display, support electronic, power supply, housing electrical connectors and external uses control

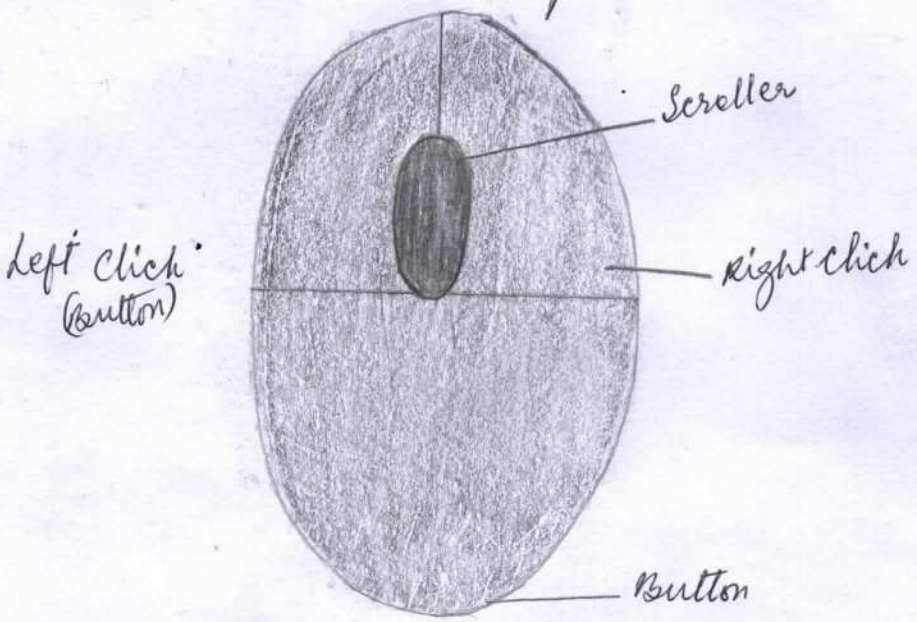


Mouse : It is an input device it is use for nodigation (movement)

Left click -> one click -> Select, close, drugs,

Double click -> open

Right click -> one/double click -> open instruction.



Keyboard : Key Board is an input device use for typing. There are 5 keys in the keyboard.

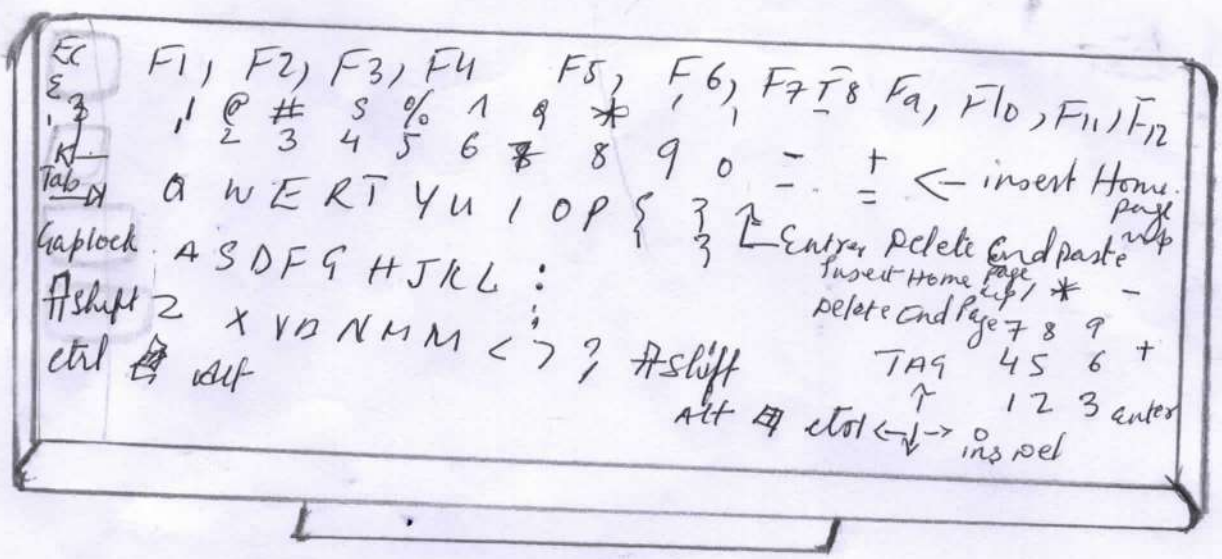
1) Alphabet keys Typing keys. It is use to type, Letter, sentences. i.e A-Z, space, ," ; : ? , { } [ ]

2) Function keys : It is used for formula and shortcut i.e $F_1 - F_2$

3) Numeric keys : It is use to type number i.e 0-9 !, @, $, %, ^, &, *, (,)

4) Navigation keys : It is used for movement i.e Insert, Hom, Pageup, Delete, End,

5) Control keys : It is used for shortcut and for formula i.e Tab ARROWLEFT ← → RIGHT capslock ⇧ shift, ctrl, Windows, Alt, ↑ - up ↓ ARROWS.

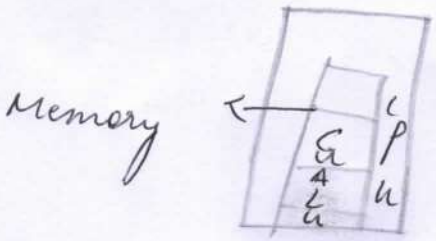


CPU - central Processing unit) it is called "the Brain of the computer".

It is used to Process execute and store data

The main Part of CPU

1) CU -> central unit
2) ALU -> Arithmetic Logic unit.
3) Memory



- CU -> central unit -> It operate. Execute the date in the system
- ALU -> It perform all type of data processing including (Arithmetic & logical operation

Q2 Discuss about the classification of computer based on size and capacity.

Ans = Super computer
Mini computer
Personal computer
Main frames
Work station.

Super computer : Multiple user performing one hundred million of instruction.

Mini computer : is a single user, powerful processer
eg: laptop, notebook, tablet, smartphone

Personal computer : is a single user but moderate processer.

Main frame : is a multiple user. Powerful Processer.

work station : multiple O/P user million of instruction.

Q3 what is the meaning of computer generation? How many computers generation are defined? What technologies were/ are used.

Ans = Computer Generation is a change in technology a computer is/was being used.

Computer Generation are define in fire generation

1) First Generation of computer → 1940-1956
→ used block for I/O and Vacum tube
→ As signed for research

-> occupied huge space
-> expensive

II) Second Generation of computer -> 1956-1963
-> used transitor
-> used for research
-> occupied less space than the 1st Generation
-> still expensive

III) Third Generation of computer -> 1964-1971
-> used IC (Integrated circuit) make less space
-> smaller size (invented of keyboard CPU Monitor
-> costly
-> Invented by (Charls Babbage he is knowas the father of modern computer.
-> faster
-> supported high level language
-> Personal Computer.

IV) Fourth Generation of Computer -> 1976-1980
-> used of microprocessor (VLSI) Very lagre scale Integrated
-> cheaper
-> speed accuracy
-> Personal computer

V) Fifth Generation of computer -> 1981.... onwards
-> More reliable
-> More faster
-> Easily Portable
-> Different size

→ Different affordables prices
→ Extra high processing speed
→ parallel processing
→ Wireless Internet
→ Personal computer.

Technologies are used

Envolving hardware
Vaccum Tube based
Transitor based
Integrated circuit based
Microprocesser based

Q4 Differentiate between Volatile and Non-Volatile memories

Ans: Volatile: it stand for Randomdom Access Memory, RAM is is a read/write memory. It is referred as main memory of the computer system. It is a temperary memory. The information ~~slot~~ stored in RAM is lost whenever the power supply to the computer is switch off.

Non Volatile: It stand for Read only Memory ROM is a permanent type of memory information is not lost when power supply is switched off. The content of ROM is inserted by the computer manufacturer and permanently stored at the time of manufacturing ROM cannot be overwritten by the computer. It is also called Non-Volatile Memory.

Q5 Distinguish ~~between~~ among system software, application software and open source software on the basis of their features.

Ans System Software is a type of computer ~~prog~~ program that is designed to run a computer's hardware and application programs. If we think of the computer as a layered model, the system software is the interface between the hardware and user application. The operating system is the best-known example of system software.

Application Software: The application software has a specific purpose for a specific task that is done under the system software.

Open Source software: Open source software is computer software that is released under a license in which the copy right holder grant user the right to use, study, change, and distribute the software and its source code to anyone and for any purpose. Open source software may be developed in a collaborative, Public manner.

Q6 a) Creat a file in MS. words to insert a paragraph about yourself and save it with file name "yourself". Describe all step involved in it

1) click on MS. Words
2) click on a blank document
3) click on work area
4) Type from the insertion line "yourself"
5) click on file
6) click on a save as
7) click on the Desktop
8) Type file name yourself and
9) click save.

Q6 b) write step regarding following

7) To change the font style
1) Select the text to be changed
2) click on Home Tab
3) click on the font Tab and
4) Select the text style you want to changed.

>) To change the font size
1) Select the text you want to changed
2) Select the home tab
3) click on font tab
4) click on the number size to reduce or increase size

>) To change the font colour
1) Select the text you want to changed
2) Select the home tab
3) click on the font tab
4) click on the text colour and
5) Select the color you want to changed.

>) To highlight (in yellow) the line reads "need to get MS's address".
1) Select the text to be highlighted
2) click on the Home Tab
3) click on font tab
4) click on Highlight and select any colour.

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

MS Word
MS word is widely used commercial word processor developed by Microsoft.

MS words is application software which is capable of

- creating
- editing
- saving, and
- printing and type of document.

1) click on MS words file
2) click on Blank document
3) click on the work area
4) Type from the insertion line 'MS word document.
5) click on file
6) click on a sane as
7) click on a Desktop
8) Type file name 'MS words document and
9) click sane.

Q8 create a file in MS-word for the following document and sane it with file name 'equation'. Describe all steps involved in it.

Equation

$X_2 + Y_3 = 30$

$Z^3 + Q^4 = 50$

$A_2 + B^3 = X_2 + Y^8$.

1) click on MS words
2) click on a Blank document
3) click on work area
4) Type from the insertion line equation

5) click on insert tab
6) click on tab
7) Select the Script tab
8) Write the following equation
9) click on file
10) click on save as
11) click on a Desktop
12) Type file name equation and
13 click save.

Q9. create a file in Ms-words that convert existing highlight text to table as shown below and save it as file name 'text_to-table.' Describe all step involved in it.

Select the text you want to convert,
select the Insert tab,
click on Table command. A dialog box appear.
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 appear	click on convert to Table, a new dialog box appear
here set numbers of columns	click on OK finally select the text Convert in a Table

Ans = click on MS word
=> click on Blank document
=> click on the work area
=> Type from the insertion line text to Table
=> Select the insert tab
=> click on convert text
=> Click on separate text Paragraph Tabs Commas other

Q10 Create a file in MS-words to insert a table in the document. Describe all step involved in it.

1) click on MS words
click on a blank document
click on the tables and
select the row and column.

Q11 create a following worksheet in MS-Excel and save it with name 'book I'.

BOOK 1

	A Roll No	B Name	C Marks
1	1	n1	60
2	2	n2	70
3	3	n3	80
4	4	n4	90
5	5	n5	40
6	6	n6	50
7	7	n7	77
8	8	n8	44
9	9	n9	88
10	10	n10	55
11			
12			
13			
14			
15			
16			
17			

Click on MS Excel
Click on Blank work book
Click Insert Sab
Select the rows and column and create Rollno name and mark

click on file
click on a save as
click on a Desktop
Type file name book I
click save.

Q12 calculate the following things of a range (C2:C77) of data in the worksheet created in question no. 10

→ the sum of the mark using Auto sum in a range of cell (C2:C11)

→ Average of the mark in a range cell (C2:C11)

→ Highest mark in a range of cell (C2:C11)

→ minimum marks in a range of cells (C2:C11).

click on MS Excel
Click on Book I
click on C_{12} and calculate the sum

= Sum (C_2, C_3, C_4, C_5 ....) + Enter

click on C_{12} and calculate the Average

= AVERAGE (C_2, C_3, C_4, C_5, C_6 .....) + Enter

Click on C_{12} and calculate the minimum

= Min (C_2, C_3, C_4, C_5 ....) + Enter

click on (C_{12} and calculate the Maximum

= MAX (C_2, C_3, C_4, C_5, ...) + Enter.

Q13 a) Describe various step involved in the following

→ To modify column width of a worksheet.

click on MS Excel
click on work Book Sheet
click on Blank document
click on Insert Tab
click on Table

Select the no of rows and column
Entry the data of Roll no name and marks
Select the whole Tables
click on Home Tab
Select the format Tab
click to column width

A Dialog box appear. In the filter we type of the column and click
Ok.

b) To modify the row height of a worksheet
click on the Home Tab
Select the format Tab
click on the row height

A dialog box appear. In the filter we type
Row height and click
Ok.

c) To delete rows and columns of a worksheet.
Click on Home tab
Select the delete tab
Click on the delete sheet rows and
Delete sheet column.

---

13 b) Describe following term in the worksheet.
-> i) Absolute reference and relative reference in formula
-> ii) cell address.

Absolute reference. An Absolute reference is Excel refers to a reference that is locked so that rows and column remain constant no matter whey they are copied.

Relative reference: An address or operater changes when the target item in moved in the relation to it has changed, a cell with relative reference changes its formula when copied else where.

ii) cell Address.

cell address is a combination of a column letter and a rows number that identifies a cell on a worksheet. for eg. A1 refer to the cell at the insertion of column. and rows, B2 refer to the 2nd all in column B and so on.

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14 a) what tool are available to customize our Power Point Presentation?
=> Home, Insert, Design, Transition, Animation, Slide, show Record, Review, view and Help.

Q14 b) Write the step for the following action for creation of power point presentation

-) open a Blank presentation
click on MS PowerPoint
Click on a Blank presentation.

c) Save the presentation as Lab 1. pptx.
click on file
click on save as
click on Desktop
Type a file name Lab 1 pptx.
click save.

d) Add a Title to the first Slide: the name of your college.
click on the New Slide
Select the Title Slide and
"St. Edmund College".

e) Type your first name and last name in the subtitle Section.
Click on the Title only
Masedata Marbaniang

f) Add a new slide which has a Title and Content
Click on New Slide
Select the Title and content Slide.

Q15 Write step for creation of a set power point slide that demonstrates your skill to use the tool of power point. It should include the following things.

a) Tittle Slide and bullet list.

Click on New Slide
Select the Tittle Slide
Click on the Home Tab
Select the paragraph Tab
Select the bullet List.

b) Inserting Excel Sheet.

Click on the New Slide
Click Tittle and Content
Click on the insert chat of the slide
A dialog box appear which shows the number of Chart.
Select any Chart required (Exam Column, pie etc And Click Ok.

c) Clip arts and Sect.

Click on Insert Tab
Select Clip arts tab.

d) Slide shows effect.

~~Click~~ Click on slide show Tab
Click on slide show effect.

PART - 2.

Q16 What is the difference between Machine Language and High level language?

Ans: The differences between Machine Language and High level language are:-

Machine-level language	High-level language
1) The machine-level language comes at the lowest level in the hierarchy, so it has zero abstraction level from the hardware	It is a user friendly language as this language is written in simple english words, which can be easily understood by humans
2) It cannot be easily understood by humans	It execute as a faster pace
3) The machine-level language is written in binary language digit, i.e, 0 and 1	It requires the compile to convert the high level language instruction into machine code
4) It does not require any as the machine code in directly executed by the computer.	The high-level code can run all the platforms, so it is a portable language
5) It is a first generation programming language	It is less memory efficient designing and maintenance are easier in a high level language

Q17 Discuss about different data type of C Programming Language

Ans The type in C can be classified as follow

i) Basic Type :- They are arithmetic types and are further classified into (a) Integer types and b) floating point types

ii) Enumerated Type :- They are again arithmetic types and they are used to define variables that can only assign certain direct integer values throughout the program.

iii) The type Void :- The type specific void that no value is available.

iv) Derived Type :- They include (a) parter type, (b) Array, (c) Structure type, (d) Union type, and (e) function type.

Q18 Find the output of the following expression

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

$X = \frac{20}{5} \times 2 + 30 - 5$

$X = 4 \times 2 + 30 - 5$

$X = 38 - 5$

$X = 33.$

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

$Y = 30 - (\frac{40}{10} + 6) + 10$

$Y = 30 - 4 + 6 + 10$

$Y = 30 - 4 + 16$

$Y = 30 - 20$

$Y = 10$

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

According to BODMAS

$z = 40 \times 0.2 - 2 + 10$

$= 8 - 2 + 10$

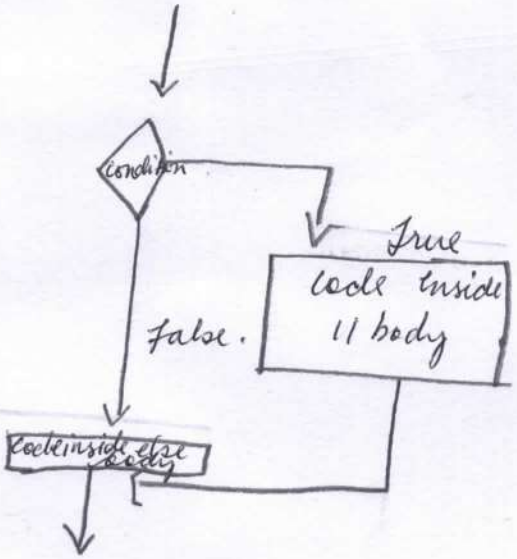
$= 8 - 12$

$= -4.$

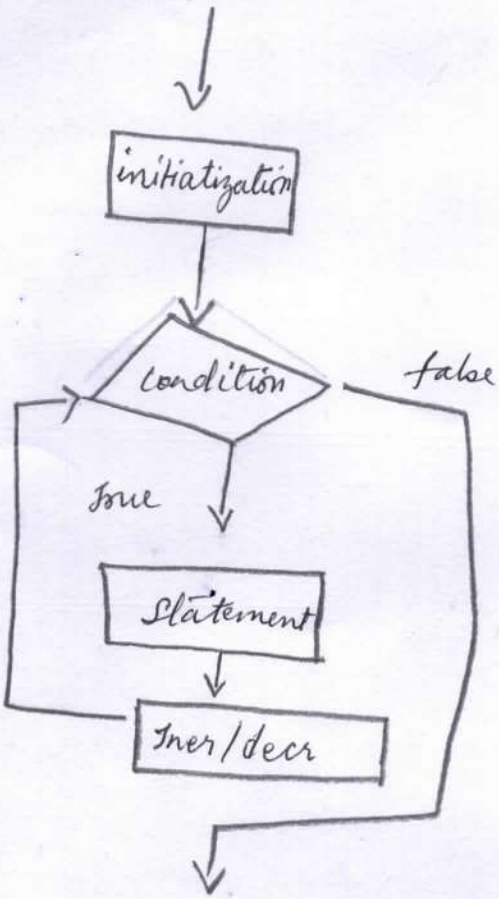
Q19 Describe the syntax of the following statement

a) If - else statement

-) If condition return true then the statement inside the body of "If" are executed and statement inside body of "else" are skipped. If condition return false then the statement inside the body of "if" are skipped and the statement in "else" are executed



b) In for loop, a loop variable is used to control the loop first initialize this loop variable to some value, then check. whether this variable is less than or greather than counter value. If statement is true, then loop body is executed and loop variable get updated. steps are repeated till exit condition comes.



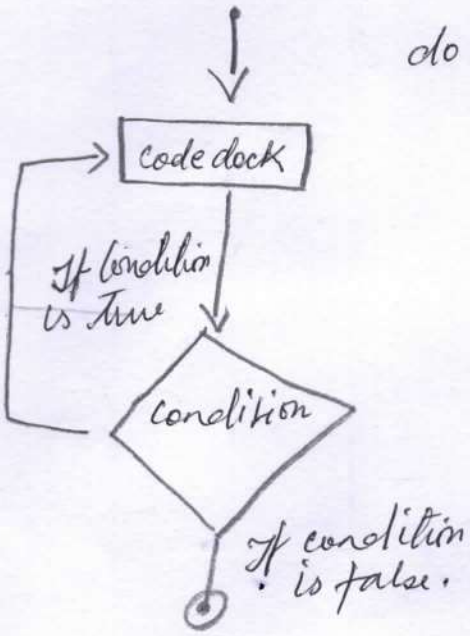
c) While loop

→ while loop (condition): Notice that the conditional expression appear at the end of the loop. So the statement(s) in the loop executes are before the condition instead. If the condition is true, the field of control jum back up to do, and the statement(s) in the loop executes again.

d) Do - while loop:

→ The c do while loop statement creates a structured loop that executes as long as a specified condition is true at the end of each pass through the loop. The syntax for a do while statements is.... If the value Expression is " false (i.e, compares equal to zero) the loop is exited.

do { Conditional code; } while(Condition)



Q20 Find the out put of the following program segment.

a)

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

b)

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

c)

```
#include <stdio.h>
void main()
{
 int a = 10, b = 100;
 if (a>b)
 Printf("Largest number is %
d\n", a);
 else
 printf("Largest number is
 % d\n", b);
 }
```

Ans

output

a)

[Running] ed "g:\c-programs" ss gcc aa.c -o ss "g:\c program\"aa
IMS Ghaziabad.

[Done] Existed with code = 0 in 1992 second

b)

[Running] ed "g:\c-Program\" ss gcc a3.c -o a3 -program\" a3
IMS Ghaziabad
IMS Ghaziabad

[Done] Existed with the code = 0 in 0.287 seconds

c)

[Running] ed "g:\" ss gcc a4.c -o4 ss "g:\" a
Largest number is 100
[Done] Existed with code = 22 is 0.228 second.