

EXTERNAL LEARNING 1

Date of submission: 16/09/2019

Learning outcomes:

- Apply basic C programming constructs to solve problems.
- Write, debug and execute C programs for simple applications using a text editor.

Important instructions:

- Assignment has to be submitted on time else marks will be deducted.
- This must be submitted along with the evaluation sheet.
- All answers must be handwritten, except for programming questions. You may take the printout of the source code along with the output.
- EACH INDIVIDUAL MUST INDEPENDENTLY SOLVE THE QUESTIONS. IF FOUND COPYING, STRICT PUNISHMENT WILL BE GIVEN.

Questions:

1. Explain in detail about the formatted I/O functions in C. Execute a sample demonstration program and submit the code and the output to show the working of formatted I/O in C.
2. Pick any one or two applications in real life (e.g: Facebook, Amazon etc). Find out what programming languages and technologies are they using for their application.
3. Search through the history of Operating systems and find out the programming language used to build various Operating systems and write a summary about the same.
4. Write a pseudocode for sign-in into Facebook (email ID and password must be valid and match with each other)
5. Execute the following programs and submit the code along with the output.

Consider that we want to do the following matrix multiplication.

$A \cdot X = B$

Input the dimensions of X and B and print the dimensions of A. In case any input is wrongly entered, print "Wrong Dimensions". Use ternary operators.

Sample input/output:

A)

Enter dimensions of X

5 3

Enter dimensions of B

6 3

Dimensions of A are: 6 5

B)

Enter dimensions of X

5 3

Enter dimensions of B

2 5

Dimensions do not match for matrix multiplication.