**Introduction to Computing**

**Lab-VI**

**Topic: Variables, data types, arithmetic operations using variables and cin**

**Objective: Learning how to:**

* **Declare and initialize variables**
* **Use int and float data types**
* **Apply arithmetic operations on variables.**
* **Take value form user through console.**

1. **You are required to make a separate project for each of the tasks given below**
2. **You are required to draw the FLOWCHART for each of the tasks**
3. **You are required to Identify Input, output and processing of each task. After that create flowchart on pages**
4. **The lab instructors will let you know how to submit the lab tasks.**

## Task 1

Declare two integer variables and initialize them as:

* num1=2
* num2=8

Calculate the square of both numbers, store them in separate variables and display the following output:

|  |
| --- |
| **Sample Output:** |
|  |

## Task 2

Repeat the Task 2 by taking values of num1 and num2 from user.

## Task 3

Get two integers as an input from the user, store the modulus of the first variable with the second one. Display the results on the console.

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| --- |
| **Sample Output:** |

## Task 4

Repeat previous lab tasks using float variables.

## Task 5

The distance between two houses is given in meters from user. Draw a flowchart on paper and then write a C ++ code to get an input in meters from the user and convert the distance in cm and store into another variable. Display your result on the console.

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| --- |
| **Sample Output:** |

## Task 6

The distance between two houses is given in meters by user. Draw a flowchart on paper and then write a C++ code to convert the input distance to feet. Store the result of conversion into a new variable. Display your result on the console. (1 meter = 3.28 feet.)

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| --- |
| **Sample Output:** |

## Task 7

Distance covered by a body is the average velocity multiplied by the time the body has been traveling for.

Draw a flowchart on paper and then write a C ++ code which calculates the distance when the velocity and time are given by the user. Calculated result must be stored into a variable

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| --- |
| **Sample Output:** |

## Task 8

Get an integer from user and display its table.

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| --- |
| Sample Output: |

## Task 9

**Please turn off your compiler and do following task on paper without compiler. After writing your answer, you can compile the code check if your output matches or not? This is an image so you cannot copy and paste this code**

Write down output of following code in box

|  |
| --- |
| **OUTPUT:** |
|  |

## Task 10

## Complete assignment 1 last question (written in red) and submit .cpp file on portal. Your instructors will guide you how to submit .cpp file on portal.