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| **Computer Programming Laboratory** |  | |
| **Laboratory 1:** Flowchart and Pseudocode and Hello World | **School of Information Technology** | |
| **Name:** | **ID:** | **Section:** |

**Objectives**

* To understand the concept of Flowchart and Pseudocode.
* To design Flowchart and Pseudocode.
* To write a first program C#

**Instruction: Study the given examples and answer all questions.**

1. Perform the following practices using any IDE.

**Sending Method:**

* Submission files are listed as follow:
  + Save this document file that contains all answers as “**Lab01\_YourID.pdf**”

**Practice I – Designing pseudo code and flowchart by fill in the answers in the boxes**

**Question 1 :** Design Pseudo code and corresponding Flowchart to ask user to input a number. If a number is positive, print “positive”. Otherwise print “zero or negative”.

**Input:** number

**Process:** check condition of number

**Output:** show message of “positive” or “zero or negative”.

**Answer Pseudo code here.**

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| 1. \_\_\_\_\_\_\_\_\_\_ “Enter a number”  2. READ \_\_\_\_\_\_\_\_  3. IF (\_\_\_\_\_\_\_\_\_) THEN  PRINT “\_\_\_\_\_\_\_\_\_\_\_”  \_\_\_\_\_\_\_  \_\_\_\_\_\_\_ “Zero or Negative” |

**Paste the flowchart from https://app.diagrams.net/ to the box below;**

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**Question 2 :** Design Pseudo code and corresponding Flowchart to transform the degree of Fahrenheit to Celsius and display it on the screen.

**Formula:** ***Celsius = (Fahrenheit - 32) \* 5/9***

**Input:** fahrenheit

**Process:** calculate a degree of Celsius

**Output:** "Degree of celsius is " + celsius

**Answer Pseudo code here.**

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**Paste the flowchart from https://app.diagrams.net/ to the box below;**

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**Practice II – Use Visual Studio 2022 to develop, compile and run program**

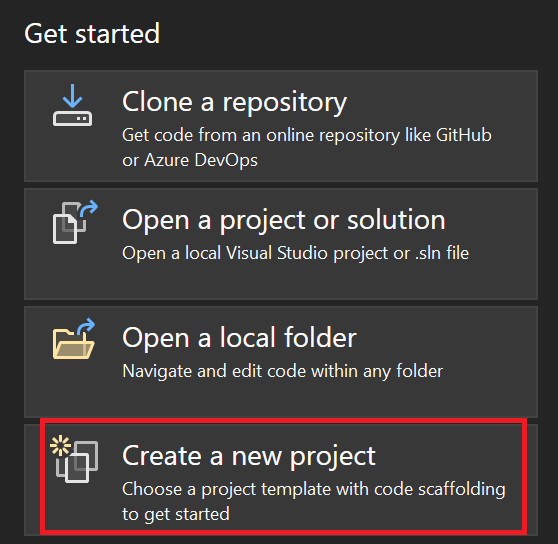
This practice shall give you the step to develop source code, compile and run Hello World program using **Visual Studio 2022 IDE** as a developer tool

**Launch Visual Studio 2022**



**Create Project**

1. Select menu *File > Create a new project*

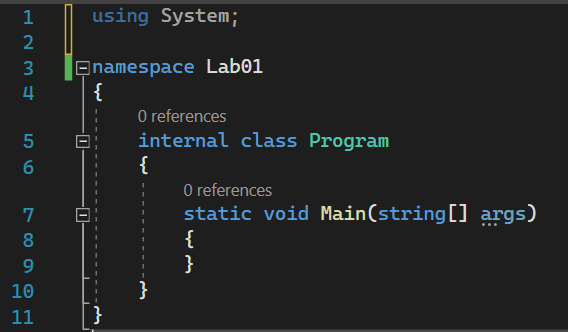
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1. Choose *C#* and *Console App* *(.Net Framework)*

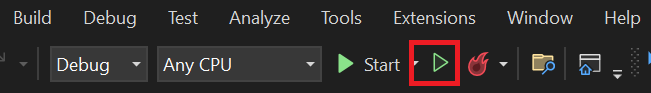
Graphical user interface

Description automatically generated

1. Enter Project Name: **your ID-Lab01**
2. Click *Create* button and then the program auto generates create a Program file.



1. Write the program to show the output “Hello World”
2. Then click run program.



**Graphical user interface, text, application, chat or text message

Description automatically generated**

**Question 1 :** Write the program to show the output is “My name is \_\_\_Your name\_\_\_\_\_”

**Answer your code here.**

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| using System;  \_\_\_\_\_\_\_\_\_ Lab01  {  \_\_\_\_\_\_\_ Program  {  static void Main(\_\_\_\_\_\_\_\_\_\_\_\_)  {  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_("My name is \_\_\_\_\_\_\_\_\_");    }  }  } |

**Question 2 :** Write the program to show the output is “My favorite food is \_\_\_name of your favorite food\_\_\_\_\_”

**Answer your code here.**

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