



Course Code: CS 116 T/L

Total Marks: 15

Date: 25th Dec, 2024

Deadline: 07th Jan, 2025

Programming Fundamentals BS SOFTWARE ENGINEERING / COMPUTER SCIENCE

Major Assignment 02

Note: The assignment is due by **11:00 AM** on the specified due date. Late submissions will result in a deduction of marks.

Q1: Write a program to calculate the grade of a student based on marks

- Marks Greater than or equal to 90 will be **Grade A**
- Marks Greater than or equal to 70 will be **Grade B**
- Marks Greater than or equal to 60 will be **Grade C**
- Marks Greater than or equal to 50 will be **Grade D**
- Marks Less than 50 will be **Fail**

Q2: Draw a Flow chart Diagram of the given **PSEUDO CODE**.

1. Initialize count = 0 (Process)
2. Cout "Hello World" (I/O)
3. Increment count by 1 (Process)
4. Is count < 5 (Decision)
5. If **True** go to step 2 else **Stop**.

Q3: Write a C++ program that declares a variable of type char and initializes it with a character value. Add 3 to the character variable and display the resulting value on the console. Then, subtract 4 from the updated variable and display the final result on the console?

Hint: Use the ASCII values of the characters to predict the output at each step.

Example Output:

Initial character: A

After adding 3: D

After subtracting 4: @