Week 1: Topics - Conditional statements, For and while (At max 2 days)

1. If else and if else ladder
    - **a. Easy Questions:**
        i. Write a program to check if a given number is positive, negative, or zero.
        ii. Determine if a number is odd or even.
        iii. Check if a person is eligible to vote (age >= 18).
        iv. Write a program to find the greatest of two numbers.
        v. Print "Pass" if a student scores more than 40 marks; otherwise, print "Fail."
        vi. Write a program to display the day of the week based on a number input (1 for Monday, 2 for Tuesday, etc.).
        vii. Implement a simple calculator to perform addition, subtraction, multiplication, and division.
        viii. Write a program to display the name of a month based on the month number (1 for January, 2 for February, etc.).
    - **b. Medium Questions:**
        i. Write a program to find the greatest of three numbers.
        ii. Check if a year is a leap year.
        iii. Write a program to classify a character entered by the user as a vowel, consonant, or neither.
        iv. Calculate the grade of a student based on the marks they score:
            1. `90-100`: Grade A
            2. `80-89`: Grade B
            3. `70-79`: Grade C
            4. `<70`: Fail.
        v. Write a program to check if three sides length form a valid triangle.
2. Loops:
    a. Easy Questions:
        i. Print all numbers from 1 to 100 using a `for` loop.

ii. Write a program to print the sum of the first `n` natural numbers. (n*n+1/ 2)
iii. Print all even numbers between 1 and 50 using a `while` loop.
iv. Write a program to display the multiplication table of a given number. First 20
v. Reverse a number using a `while` loop.
    1. Also can we get the sum of all the digits.
vi. Write a program to count the number of digits in a given number using a `while` loop.
vii. Write a program that keeps asking the user to enter numbers until they enter a negative number. Use a `while` loop.

b. **Medium Questions:**

i. Print the first 10 terms of the Fibonacci series using a `for` loop.
ii. Check if a given number is a prime number using a `for` loop.
iii. Write a program to calculate the factorial of a number using a `while` loop.
iv. Print all numbers from 1 to 100 that are divisible by 3 and 5 using a `for` loop.
v. Implement a menu-driven program where the user can choose to:
    1. Find the square of a number.
    2. Find the cube of a number.
    3. Exit.
vi. Implement a basic login system where the user has three attempts to enter the correct password using a loop.

3.