Assignment 1 :

Pseudocode Development - Task: Write a detailed pseudocode for a simple program that takes a number as input, calculates the square if it's even or the cube if it's odd, and then outputs the result. Incorporate conditional and looping constructs.

Solution:

1. Start

2. Prompt the user to input a number “Enter a number”

3. Read the input number and store it in a variable num

4. Initialize a variable result to store the result

5. If num modulo 2 is equal to 0 (num % 2 == 0), then:

a. Set result to the square of num (result = num\*num)

6. Else:

a. Set result to the cube of num (result = num\*num\*num)

7. Output result

8. End