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.

1. Start

2. Prompt the user to enter a number and store it in a variable "number".

3. Check if the number is even or odd:

3.1 If the number % 2 equals 0:

3.1.1 Set "isEven" to true.

3.2 Else:

3.2.1 Set "isEven" to false.

4. If "isEven" is true:

4.1 Calculate the square of the number and store it in a variable "result".

(Square of a number = number \* number)

4.2 Output "The square of the number is: result".

5. If "isEven" is false:

5.1 Calculate the cube of the number and store it in a variable "result".

(Cube of a number = number \* number \* number)

5.2 Output "The cube of the number is: result".

6. End