Assignment 1:

Pseudocode Development - Task: Write a detailed pseudocode fora 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.

Describe:- If the number is even then it calculates the square(num\*num)if it's odd, it calculates the cube(num\*num\*num).

START

Declare num As Integer

Declare result As Integer

OUTPUT "Enter a number: "

INPUT num

% SIGN indicate as a mod

// If number is even then square is executed formula of square is num\*num

IF (num MOD 2 == 0) Then

result = num \* num

OUTPUT ("The square of", num, “result”);

ELSE

// If number is odd then cube is executed formula of cube is num\*num\*num

result = num \* num \* num

OUTPUT( "The cube of", num, “result”);

END IF

END

#include <stdio.h>

#include<conio.h>

int main() {

int num, x;

printf("Enter a number ");

scanf("%d", &num);

//number is even

if (num % 2 == 0)

{

//number is even thencalculate the square

result = num \* num;

printf("The square of %d %d", num, result);

} else

{

// number is odd then calculate the cube

x = num \* num \* num;

printf("The cube of %d %d", num, result);

}

}