**( QUESTION: 02 )**

Modify the program by adding another function to find power of a number if the base and exponent is provided in the main function. In this function use pass by reference mechanism to compute the power then display the result in main function; Note: Your function should not return a value.

**Solution:**

#include <iostream>

using namespace std;

void Power(double base, int exponent, double &result)

{

result = 1.0;

// Handle negative exponents

if (exponent < 0) {

base = 1.0 / base;

exponent = -exponent;

}

for (int i = 0; i < exponent; i++)

{

result \*= base;

}

}

int main()

{

double base;

int exponent;

double result;

cout << "Enter the base: ";

cin >> base;

cout << "Enter the exponent: ";

cin >> exponent;

Power(base, exponent, result);

// Result

cout << "Result: " << result << std::endl;

return 0;

}

**OUTPUT**

