Central University of Haryana

School of Engineering and Technology
Department of Computer Science Engineering

Object Oriented Programming using C++ Lab
Assignment - 02

Submitted by

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Course :– OOPS Lab Course Code :- BT CS 405

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Assignment - 02

a) Problem statement:

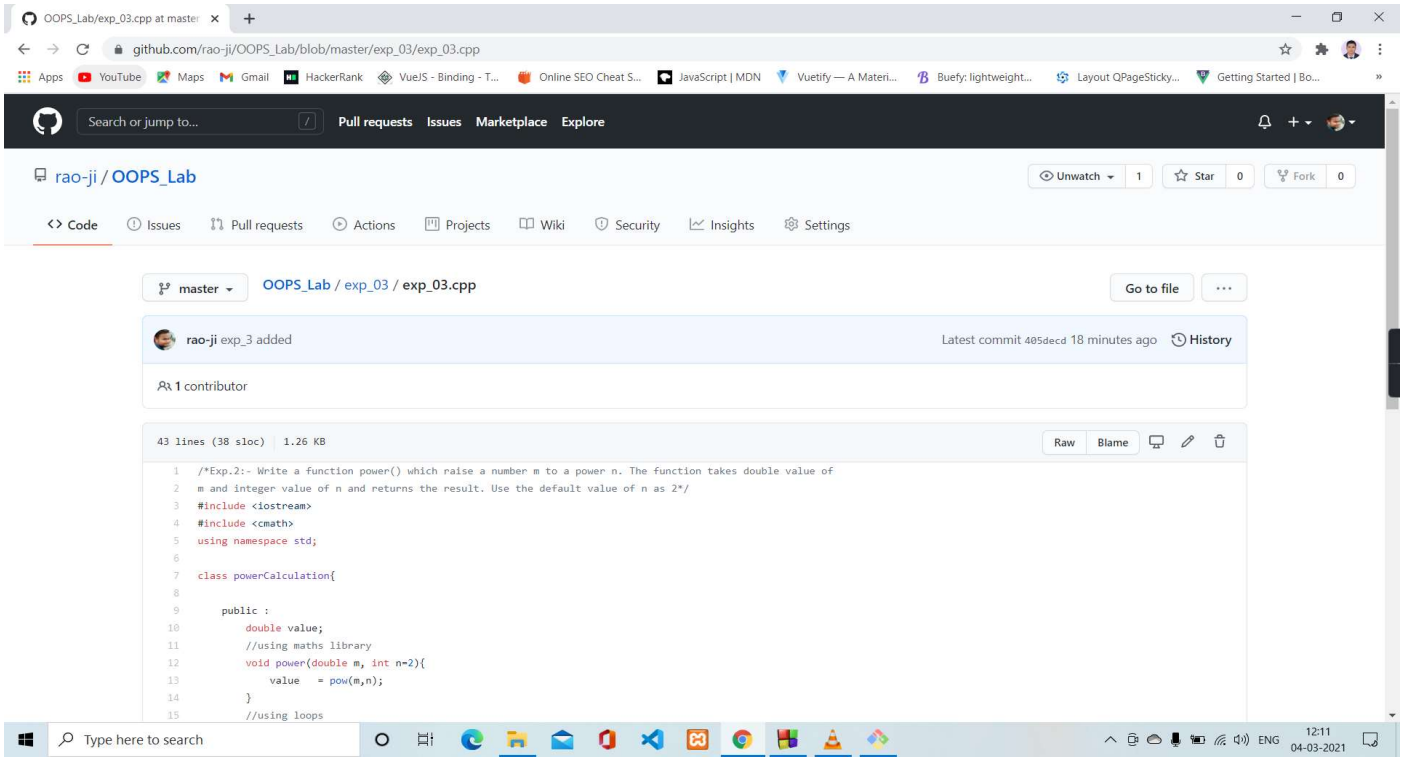
Write a function power() which raise a number m to a power n. The function takes double value of m and integer value of n and returns the result. Use the default value of n as 2.

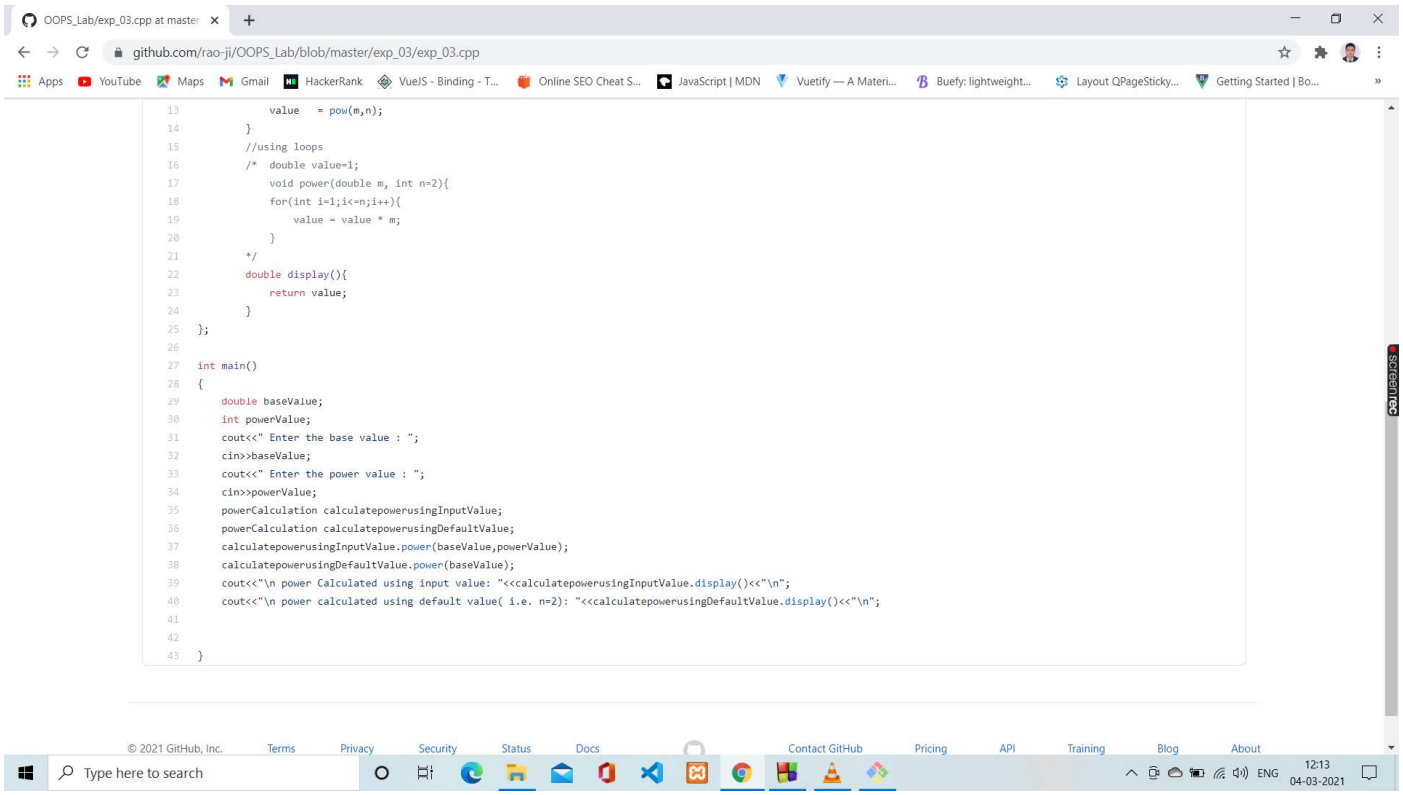
b) Code:

```
#include <iostream>
#include <cmath>
using namespace std;

class powerCalculation{

   public :
      double value;
      //using maths library
      void power(double m, int n=2){
         value   = pow(m,n);
      }
      //using loops
      /*  double value=1;
         void power(double m, int n=2){
         for(int i=1;i<=n;i++){
            value = value * m;
         }
      */
      double display(){
         return value;
      }
};

int main()
{
   double baseValue;
   int powerValue;
   cout<<" Enter the base value : ";
   cin>>baseValue;
   cout<<" Enter the power value : ";
   cin>>powerValue;
```

```
    powerCalculation calculatepowerusingInputValue;
    powerCalculation calculatepowerusingDefaultValue;
    calculatepowerusingInputValue.power(baseValue,powerValue);
    calculatepowerusingDefaultValue.power(baseValue);
    cout<<"\n power Calculated using input value:
"<<calculatepowerusingInputValue.display()<<"\n";
    cout<<"\n power calculated using default value( i.e. n=2):
"<<calculatepowerusingDefaultValue.display()<<"\n";
}
```

Screenshot of code after uploading on Github:





Link of Github Repository:

https://github.com/rao-ji/OOPS_Lab/blob/master/exp_03/exp_03.cpp

c) Output :