

CENTRAL UNIVERSITY OF HARYANA

Department of Computer Science & Engineering under SOET



C++ Programming Lab

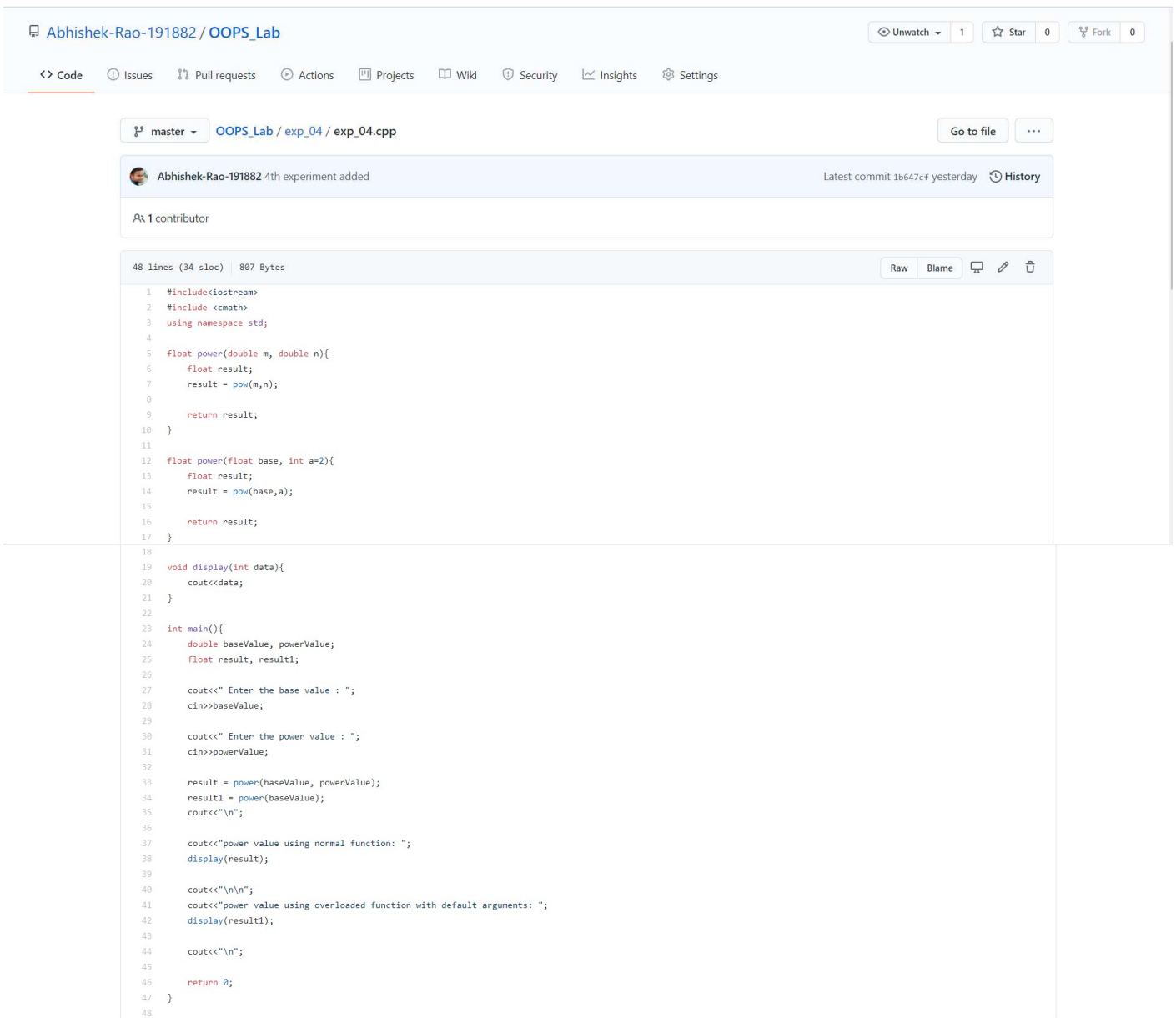
Write a program to show that the effect of default arguments can be alternatively achieved by overloading.

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Submitted to
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Program - 1: Write a program to show that the effect of default arguments can be alternatively achieved by overloading.

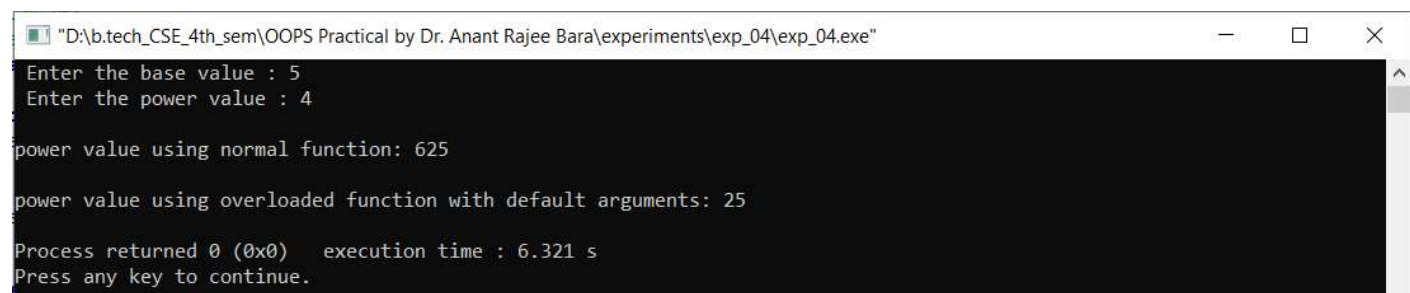
Code:



The screenshot shows a GitHub repository page for 'Abhishek-Rao-191882 / OOPS_Lab'. The repository has 1 star and 0 forks. The file 'exp_04.cpp' is selected, showing 48 lines of C++ code. The code defines two overloaded functions: 'power(double m, double n)' and 'power(float base, int a=2)'. The 'main' function prompts the user for a base value and a power value, then calls both functions to demonstrate their behavior.

```
1 #include<iostream>
2 #include <cmath>
3 using namespace std;
4
5 float power(double m, double n){
6     float result;
7     result = pow(m,n);
8
9     return result;
10 }
11
12 float power(float base, int a=2){
13     float result;
14     result = pow(base,a);
15
16     return result;
17 }
18
19 void display(int data){
20     cout<<data;
21 }
22
23 int main(){
24     double baseValue, powerValue;
25     float result, result1;
26
27     cout<<" Enter the base value : ";
28     cin>>baseValue;
29
30     cout<<" Enter the power value : ";
31     cin>>powerValue;
32
33     result = power(baseValue, powerValue);
34     result1 = power(baseValue);
35     cout<<"\\n";
36
37     cout<<"power value using normal function: ";
38     display(result);
39
40     cout<<"\\n\\n";
41     cout<<"power value using overloaded function with default arguments: ";
42     display(result1);
43
44     cout<<"\\n";
45
46     return 0;
47 }
48
```

Output:



The screenshot shows a Windows command prompt window titled '"D:\b.tech_CSE_4th_sem\OOPS Practical by Dr. Anant Rajee Bara\experiments\exp_04\exp_04.exe"'. The output of the program is as follows:

```
Enter the base value : 5
Enter the power value : 4

power value using normal function: 625

power value using overloaded function with default arguments: 25

Process returned 0 (0x0)   execution time : 6.321 s
Press any key to continue.
```