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Power Function

WRITE A FUNCTION `POWER()` WHICH RAISES A NUMBER `M` TO A POWER `N`. THE FUNCTION TAKES A DOUBLE VALUE OF `M` AND AN INTEGER VALUE OF `N` AND RETURNS THE RESULT. USE A DEFAULT VALUE OF `N` IS 2 TO MAKE THE FUNCTION CALCULATE SQUARES WHEN THIS ARGUMENT IS OMITTED.

CODE

```
39 lines (31 sloc) 820 Bytes
1  /*
2  Write a function power() which raises a number m to a power n. The function takes double value of m and
3  integer value of n and returns the result. Use a default value of n is 2 to make the function to calculate
4  squares when this argument is omitted.
5  */
6
7  #include <iostream>
8  using namespace std;
9
10 class Math
11 {
12 public:
13     double power(double m, int n=2)
14     {
15         int product=1;
16         for (int i = 0; i < n; i++)
17         {
18             product = product * m;
19         }
20
21         return product;
22     }
23 };
24
25 int main()
26 {
27     double num1, result;
28     int num2;
29
30     cout<<"Enter any real number as base and an integer as the power you want it to calculate: ";
31     cin>>num1>>num2;
32
33     Math object;
34
35     result = object.power(num1, num2);
36     cout<<"The calculated result is: "<<result<<endl;
37
38     return 0;
39 }
```

OUTPUT

```
PS D:\CUH\4th Sem\OOP with C++\Lab\3. Power Function> cd "d:\CUH\4th Sem\OOP with C++\Lab\3. Power Function\" ; if ($?) { g++ PowerFunc.cpp -o PowerFunc } ; if ($?) { .\PowerFunc }
Enter any real number as base and an integer as the power you want it to calculate: 2 5
The calculated result is: 32
PS D:\CUH\4th Sem\OOP with C++\Lab\3. Power Function> |
```

[GitHub Link](#)