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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                                    Raw  Blame  ▢  🗗  ✎  🗑

  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