

Activities Text Editor Apr 29 14:31 Assignment2.cpp ~/11260 Save

```
1 /*
2 Assignment 2
3 Write a menu driven program to calculate area of circle, rectangle and triangle
4 Name-Dev Sarode
5 Division-12
6 Roll no-11260
7 Date-18/02/2025
8 */
9 #include <iostream>
10 #include <cmath>
11 #include <string>
12 using namespace std;
13 class shape
14 {
15     public:
16     double radius; //Data member
17     double length;
18     double breadth;
19     double base;
20     double height;
21     double areacircle(){ //Area of circle
22         return M_PI*radius*radius;
23     }
24     double arearectangle(){ //Area of rectangle
25         return length*breadth;
26     }
27     double areatriangle(){ //Area of traingle
28         return 0.5*base*height;
29     }
30 };
31 int main(){
32     shape s; //Creating an object in class
33     int i;
34     string o;
35     do{
36         cout<<"Enter the operation you wish to choose:"<<endl;
37         cout<<"1. Area of Circle"<<endl;
```

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Assignment2.cpp

~/11260

Save



```
34 string o;  
35 do{  
36 cout<<"Enter the operation you wish to choose:"<<endl;  
37 cout<<"1. Area of Circle"<<endl;  
38 cout<<"2. Area of Rectangle"<<endl;  
39 cout<<"3. Area of Triangle"<<endl;  
40 cin>>i;  
41 switch (i){  
42     case 1:  
43         cout<<"Enter radius:";  
44         cin>>s.radius; //Taking input in class  
45         cout<<"Area of Circle is:"<<s.areacircle()<<endl; //Calling member function  
46         break;  
47  
48     case 2:  
49         cout<<"Enter length:";  
50         cin>>s.length; //Taking input in class  
51         cout<<"Enter breadth:";  
52         cin>>s.breadth; //Taking input in class  
53         cout<<"Area of Rectangle is:"<<s.arearectangle()<<endl; //Calling member function  
54         break;  
55     case 3:  
56         cout<<"Enter base:";  
57         cin>>s.base; //Taking input in class  
58         cout<<"Enter height:";  
59         cin>>s.height; //Taking input in class  
60         cout<<"Area of Triangle is:"<<s.areatriangle()<<endl; //Calling member function  
61         break;  
62     default:  
63         cout<<"Your details have been Entered incorrectly";  
64 }  
65 cout<<"Do you wish to continue(y/n):";  
66 cin>>o;  
67 } while(o=="y");  
68 return 0;  
69 }  
70 }
```

```
fe@pict-OptiPlex-3020:~/11260$ g++ Assignment2.cpp
```

```
fe@pict-OptiPlex-3020:~/11260$ ./a.out
```

Enter the operation you wish to choose:

1. Area of Circle
2. Area of Rectangle
3. Area of Triangle

1

Enter radius:3

Area of Circle is:28.2743

Do you wish to continue(y/n):y

Enter the operation you wish to choose:

1. Area of Circle
2. Area of Rectangle
3. Area of Triangle

2

Enter length:6

Enter breadth:4

Area of Rectangle is:24

Do you wish to continue(y/n):y

Enter the operation you wish to choose:

1. Area of Circle
2. Area of Rectangle
3. Area of Triangle

3

Enter base:4

Enter height4

Area of Triangle is:8

Do you wish to continue(y/n):n

```
fe@pict-OptiPlex-3020:~/11260$
```