

## **TASK : FUNCTION OVERLOADING**

You need to perform following tasks:

- 1) Write a C++ program to find a circle, triangle and rectangle. Keep following things in mind:
  - a. User will first choose shape.
  - b. User will enter requiride inputs, such as radius if opted for circle and similarly for rectangle and triangle.
  - c. Name of function must be “area”
  - d. Example Output: Area of triangle is 144 sq.units.
- 2) Post this code to your GitHub repository.

### **PROGRAM:**

```
#include<iostre  
am>
```

```
#include<math.  
h>
```

```
using  
namespace std;
```

```
int main()
```

```
{
```

```
float  
a,b,c,s,r,area;
```

```
int ch;
```

```
cout<<"1.Area  
Of Circle";
```

```
cout<<"\n2.Are  
a Of  
Rectangle";
```

```
cout<<"\n3.Are  
a Of Triangle  
\n";
```

```
cout<<"\nEnter  
Your Choice :";
```

```
cin>>ch;
```

```
switch(ch)
```

```
{  
  
case 1:  
  
{  
  
cout<<"\nEnter  
Radius Of The  
Circle: ";  
  
cin>>r;  
  
area=3.14*r*r;  
  
break;  
  
}  
  
case 2:  
  
{  
  
cout<<"\nEnter  
Length And  
Breadth Of  
Rectangle:";  
  
cin>>a>>b;  
  
area=a*b;  
  
break;  
  
}  
  
case 3:  
  
{  
  
cout<<"\nEnter  
Three Sides Of  
The Triangle:";  
  
cin>>a>>b>>c;  
  
s=(a+b+c)/2;  
  
area=sqrt(s*(s-  
a)*(s-b)*(s-c));
```

```

break;

}

default:
cout<<"\n
Invalid Choice
Try
Again...!!!";

break;

}

cout<<"Area =
"<<area<<endl;

return 0;

}

```

## OUTPUT:

```

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

Enter Your Choice :1

Enter Radius Of The Circle: 9
Area = 254.34

```

```

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

Enter Your Choice :2

Enter Length And Breadth Of Rectangle:8
4
Area = 32

```

```

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

Enter Your Choice :3

Enter Three Sides Of The Triangle:18
18
18
Area = 140.296

```