

Function Overloading (C++)

```
#include<iostream.h>
#include<stdlib.h>
#include<conio.h>
#define pi 3.14

class fn
{
    public:
        void area(int); //circle
        void area(int,int); //rectangle
        void area(float ,int,int); //triangle
};

void fn::area(int a)
{
    cout<<"Area of Circle:"<<pi*a*a;
}
void fn::area(int a,int b)
{
    cout<<"Area of rectangle:"<<a*b;
}
void fn::area(float t,int a,int b)
{
    cout<<"Area of triangle:"<<t*a*b;
}

void main()
{
    int ch;
    int a,b,r;
    clrscr();
    fn obj;
    cout<<"\n\t\tFunction Overloading";
    cout<<"\n1.Area of Circle\n2.Area of Rectangle\n3.Area of Triangle\n4.Exit\n:";
    cout<<"Enter your Choice:";
    cin>>ch;

    switch(ch)
    {
        case 1:
            cout<<"Enter Radius of the Circle:";
            cin>>r;
            obj.area(r);
            break;
        case 2:
```

```
        cout<<"Enter Sides of the Rectangle:";
        cin>>a>>b;
        obj.area(a,b);
        break;
    case 3:
        cout<<"Enter Sides of the Triangle:";
        cin>>a>>b;
        obj.area(0.5,a,b);
        break;
    case 4:
        exit(0);
    }
    getch();
}
```