A C++ PROGRAMME ON FUNCTION OVERLOADING:

#include<iostream>  
#include<cstdlib>  
using namespace std;  
  
float area(float r)  
{  
        return(3.14 \* r \* r);  
}  
float area(float b,float h)  
{  
        return(0.5 \* b \* h);  
}  
float area(float l,float b)  
{  
        return (l \* b);  
}  
int main()  
{  
        float b,h,r,l;  
        int ch;  
  
        do  
        {  
                cout<<"\n\n \*\*\*\*\*Menu\*\*\*\*\* \n";  
                cout<<"\n 1. Area of Circle";  
                cout<<"\n 2. Area of Triangle";  
                cout<<"\n 3. Area of Rectangle";  
                cout<<"\n 4. Exit";  
                cout<<"\n\n Enter Your Choice : ";  
                cin>>ch;  
                switch(ch)  
                {  
                        case 1:  
                        {  
                                cout<<"\n Enter the Radius of Circle : ";  
                                cin>>r;  
                                cout<<"\n Area of Circle : "<<area(r);  
                                break;  
                        }  
                        case 2:  
                        {  
                                cout<<"\n Enter the Base & Height of Triangle : ";  
                                cin>>b>>h;  
                                cout<<"\n Area of Triangle : "<<area(b,h);  
                                break;  
                        }  
                        case 3:  
                        {  
                                cout<<"\n Enter the Length & Bredth of Rectangle : ";  
                                cin>>l>>b;  
                                cout<<"\n Area of Rectangle : "<<area(l,b);  
                                break;  
                        }  
                        case 4:  
                                exit(0);  
                        default:  
                                cout<<"\n Invalid Choice... ";  
                }  
        }while(ch!=4);  
        return 0;  
}

# OUTPUT:

1.Area of circle:

\*\*\*\*\*Menu\*\*\*\*\*

1.Area of circle

2.Area of triangle

3.Area of rectangle

4.Exit

Enter your choice:1

Enter the radius of circle:2

Area of the circle:12.56

2.Area of triangle:

\*\*\*\*Menu\*\*\*\*\*\*

1.Area of circle

2.Area of triangle

3.Area of rectangle

4.Exit

Enter your choice:2

Enter the base and height of triangle:6 2

Area of triangle:6

3.Area of rectangle:

\*\*\*\*\*Menu\*\*\*\*\*

1.Area of circle

2.Area of triangle

3.Area of rectangle

4.Exit

Enter your choice:3

Enter the length and breadth:3 6

Area of rectangle:18