

Assignment no. 8

```
#include<iostream>
using namespace std;
class triangle
{
    double height;
    double base;
public:
    triangle()    //Default constructor
    {
        height=0;
        base=0;
    }
    triangle(double a,double b)    //parameter constructor
    {
        height=a;
        base=b;
    }
    triangle(triangle &t)    // copy constructor
    {
        height=t.height;
        base=t.base;
    }
    float area()
    {
        return (((height*base)/2));
    }
    ~triangle()
    {
        cout<<"Object Destroyed"<<endl;
    }
};

int main()
{
    triangle t1(10,6),t2(5,6),t3(t1);
    float a,b,c;
    a=t1.area();
    b=t2.area();
    c=t3.area();
    cout<<"Area of triangle 1:"<<a<<endl;
    cout<<"Area of triangle 2:"<<b<<endl;
    cout<<"Area of triangle 3:"<<c<<endl;
    {
        triangle t4(t1);
    }
}
```

```
float d=t4.area();  
cout<<"Area of triangle 4 :"<<d<<endl;  
}  
cout<<"Entering main"<<endl;  
return 0;  
}
```

Output :

```
pc@pc-Precision-Tower-3420:~/Desktop$ g++ p123u.cpp  
pc@pc-Precision-Tower-3420:~/Desktop$ ./a.out  
Area of triangle 1:30  
Area of triangle 2:15  
Area of triangle 3:30  
Area of triangle 4 :30  
Object Destroyed  
Entering main  
Object Destroyed  
Object Destroyed  
Object Destroyed  
pc@pc-Precision-Tower-3420:~/Desktop$
```