



Inheritance Introduction

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Problem

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One of the important topics of Object Oriented Programming is Inheritance. Inheritance allows us to define a class in terms of another class, which allows us in the reusability of the code. Check out the code below:

```
class Triangle{
public:
    void triangle(){
        cout<<"I am a triangle\n";
    }
};
```

The class Triangle has a function called triangle(). Now we create a class derived from the base class Triangle called Isosceles.

```
class Isosceles : public Triangle{
public:
    void isosceles(){
        cout<<"I am an isosceles triangle\n";
    }
};
```

Now we can create a derived class object and use it to access the functions of the base class.

```
int main(){
    Isosceles isc;
    isc.isosceles();
    isc.triangle();
    return 0;
}
```

This code will print:

```
I am an isosceles triangle
I am a triangle
```

Now write a function in Isosceles class such that the output is as given below.

Sample Output

```
I am an isosceles triangle
In an isosceles triangle two sides are equal
I am a triangle
```

Submissions: [15952](#)



Max Score: 20

Difficulty: Easy

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C++



```
16 #include <cmath>
17 #include <cstdio>
18 #include <vector>
19 #include <iostream>
20 #include <algorithm>
21 using namespace std;
22
23
24 class Triangle{
25     public:
26     void triangle(){
27         cout<<"I am a triangle\n";
28     }
29 };
30 class Isosceles : public Triangle{
31     public:
32     void isosceles(){
33         cout<<"I am an isosceles triangle\n";
34     }
35     void description()
36     {
37         cout<<"In an isosceles triangle two sides are equal\n";
38     }
39 }
40
41 //Write your code here.
42 };
43 int main(){
44     Isosceles isc;
45     isc.isosceles();
46     isc.description();
47     isc.triangle();
48     return 0;
49 }
50
```

Line: 45 Col: 21

 [Upload Code as File](#)☐ Test against custom input[Run Code](#)[Submit Code](#)

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