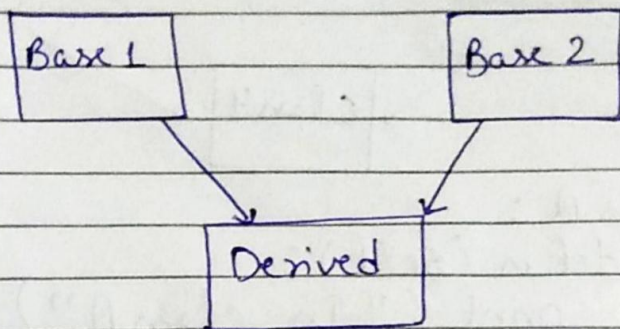


## Section-1

### 1. Multiple inheritance

When a class has more than one parent class (or is derived from than one base class) it is called multiple inheritance



```
def class A:
```

```
    def m(self):
```

```
        print("In class A")
```

```
def class B:
```

```
    def m(self):
```

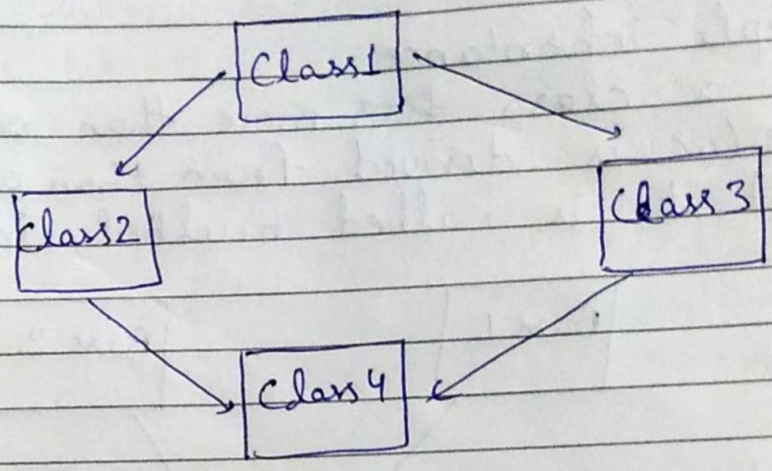
```
        print("In class B")
```

```
def class C(A, B):
```

```
    pass
```

Multiple inheritance comes along with complexity & ambiguity as it can inherit from more than one classes so if some data member is same in both parent classes than there is ambiguity. A good example would be the situation such as diamond problem.

# The Diamond problem



```
def class A :  
    def m (self) :  
        print ("In class A")
```

```
def class B (A) :  
    def m (self) :  
        print ("In class B")
```

```
def class C (A) :  
    def m (self) :  
        print ("In class C")
```

```
def class D (B,C) :  
    pass
```