

In [2]: *#Single Inheritance*

```
class College(object):
    fees = 1000000
    @classmethod

    def available_cash(cls):
        print(cls.fees)

class MU(College):
    pass

class MU2(College):
    fees = 200000
    @classmethod
    def available_cash(cls):
        print(cls.fees + College.fees)

a = MU()
a.available_cash()

s=MU2()
s.available_cash()
```

1000000

1200000

In [3]: *#Multiple Inheritance*

```
class Dad:
    def hair(self):
        print("Hair is blonde coloured")

class Mom:
    def color(self):
        print("skin colour is cream")

class Child(Dad, Mom):
    pass

c=Child()
print('Child\'s inherited attributes: ')
c.hair()
c.color()
```

Child's inherited attributes:

Hair is blonde coloured

skin colour is cream

```
In [6]: class Dinosaur(object):
        def __init__(self):
            self.a = "Dinosaur: Old aged Reptile"
            print(self.a)
            super().__init__()

        class Reptile(object):
            def __init__(self):
                self.b = "Reptiles: Hybrids are present day vertebrae, i.e snakes"
                print(self.b)
                super().__init__()

        class Velociraptor(Dinosaur,Reptile):
            def __init__(self):
                self.c = "I am an old aged reptile, Velociraptor, a dinosaur"
                print(self.c)
                super().__init__()

o = Velociraptor()
```

I am an old aged reptile, Velociraptor, a dinosaur
Dinosaur: Old aged Reptile
Reptiles: Hybrids are present day vertebrae, i.e snakes

```
In [7]: try:
        x = int(input("Enter a number between 100 and 200: "))
        assert x>=5 and x<=10
        print("The entered number: ",x)
    except AssertionError:
        print("Condition not satisfied")
    finally:
        print("Thank you for working with us")
```

Enter a number between 100 and 200: 99
Condition not satisfied
Thank you for working with us

```
In [14]: class AgeValidityException(Exception):
        pass
    try:
        age=int(input("Enter your age to check voting eligibility: "))
        if age<18:
            raise AgeValidityException;
        else:
            print("You are eligible to vote!!!")
    except AgeValidityException:
        print("You cannot vote....Sorry!!!")
    finally:
        print("Thank you...")
```

Enter your age to check voting eligibility: 17
You cannot vote....Sorry!!!
Thank you...

```
In [17]: class Error_Exceptions(Exception):  
         pass  
         class ZeroDivision(Error_Exceptions):  
             pass  
         try:  
             n = int(input("Enter a number: "))  
             if n ==0:  
                 raise ZeroDivision;  
         except ZeroDivision:  
             print("Input value is zero, try again!")  
             print()
```

Enter a number: 0

Input value is zero, try again!