**INHERITANCE PROGRAMS**

class parents(object):*#parent class* def \_\_init\_\_(self,name,id):  
 self.name=name  
 self.id=id  
 def display(self):  
 print(self.name)  
 print(self.id)  
 class employee(parents):*#child class* def \_\_init\_\_(self, salary, post, name,id):  
 self.salary=salary  
 self.post=post  
 parents.\_\_init\_\_(self,name,id)*#initialization of parent class to child class*a=parents(**"yuvi"**,100)  
a.display()

**output:**

yuvi

100

**MULTIPLE INHERITANCE**

class base1(object):*#multilevel inheritance* def \_\_init\_\_(self):  
 self.str1=**"task1"** print(**"base1"**)  
class base2(object):  
 def \_\_init\_\_(self):  
 self.str2=**"task2"** print(**"base2"**)  
class derived(base1,base2):  
 def \_\_init\_\_(self):  
 base1.\_\_init\_\_(self)*#calling constructor of* base2.\_\_init\_\_(self)*#boths classes* def printstr(self):  
 print(self.str1,self.str2)  
obj=derived()  
obj.printstr()

**output:**

base1

base2

task1 task2

**MULTILEVEL INHERITANCE**

class base(object):  
 def \_\_init\_\_(self,name):  
 self.name=name  
 def getname(self):  
 return self.name  
class child(base):  
 def \_\_init\_\_(self,name,age):  
 base.\_\_init\_\_(self,name)*#initiating of parent to child* self.age=age  
 def getage(self):  
 return self.age  
class grandchild(child):  
 def \_\_init\_\_(self,name,age,address):  
 child.\_\_init\_\_(self,name,age)*#initiating process* self.address=address  
 def getaddress(self):  
 return self.address  
obj=grandchild(**"Yuvi"**,21,**"divya"**)  
print(obj.getname(),obj.getage(),obj.getaddress())

**OUTPUT:**

**Yuvi 21 divya**