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In [ ]: #Program to demonstrate inheritance concepts

#MULTILEVEL INHERITANCE

class Customer:
    def __init__(self,cid,name):
        self.cid=cid
        self.name=name

class Account(Customer):
    def __init__(self, cid, name,accNo):
        super().__init__(cid, name)
        self.accNo=accNo

class Payment(Account):
    def __init__(self, cid, name, accNo,pid,amount):
        super().__init__(cid, name, accNo)
        self.pid=pid
        self.amount=amount

    def display(self):
        print("Customer ID      : ",self.cid)
        print("Customer Name    : ",self.name)
        print("Account Number: ",self.accNo)
        print("Payment ID       : ",self.pid)
        print("Payment Amount: ",self.amount)

cid=input("Enter Customer ID")
name=input("Enter Customer Name")
accNo=input("Enter Account Number")
pid=input("Enter Payment ID")
amount=input("Enter Payment Amount")
pObj=Payment(cid,name,accNo,pid,amount)
pObj.display()
```

```
Customer ID      : 11
Customer Name    : PAVI
Account Number: 11348754
Payment ID       : 56IA
Payment Amount: 5000
```

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In [ ]: # HIERARCHICAL INHERITANCE

class Product:
    def fun1(self):
        print("Product is the parent class.")

# Derived class1
class Basket(Product):
    def fun2(self):
        print("Basket is the child 1.")

# Derivied class2
class Babywrap(Product):
    def fun3(self):
        print("Babywrap is the child 2.")

obj1 = Basket()
```

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obj2 = Babywrap()
obj1.fun1()
obj1.fun2()
obj2.fun1()
obj2.fun3()
```

Product is the parent class.

Basket is the child 1.

Product is the parent class.

Babywrap is the child 2.

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In [ ]: #MULTIPLE INHERITANCE

class Product1:Product1name = ""
def Product(self):
    print(self.Product1name)

# Base class2
class Product2:Product2name = ""
def Product(self):
    print(self.Product2name)

# Derived class
class Product3(Product1, Product2):
    def Products(self):
        print("Product1 :", self.Product1name)
        print("Product2 :", self.Product2name)

s1 = Product3()
s1.Product1name = "Basket"
s1.Product2name = "Babywrap"
s1.Products()
```

Product1 : Basket

Product2 : Babywrap