*Program - class*class person:  
 def \_\_init\_\_(self,name,age):  
 self.name=name  
 self.age=age  
  
 def printfun(self):  
 print("My name is " ,self.name, ",age is ", self.age)  
  
p1= person ("John",37)  
p1.printfun()  
  
*#Program-delete*class person:  
 def \_\_init\_\_( self,name,age):  
 self.name=name  
 self.age=age  
 def printfun(self):  
 print("My name is ",self.name,",age is ",self.age)  
  
p2=person("Mary",35)  
p2.printfun()  
*#del p2.age*print(p2.age)  
p2.name ="Ram"  
p2.printfun()  
  
*#program - Create a class named Person, with firstname and lastname properties, and a printname method:*class person:  
 def \_\_init\_\_(self,fname,lname):  
 self.firstname=fname  
 self.lastname=lname  
 def printname(self):  
 print(self.firstname,self.lastname)  
  
p2=person("Amenda","johnson")  
p2.printname()  
  
*#Program- create base and derived class*class person: *#baseclass* def \_\_init\_\_(self,fname,lname):  
 self.firstname=fname  
 self.lastname=lname  
 def printname(self):  
 print(self.firstname,self.lastname)  
  
class student(person): *#Derived class* pass  
  
p3=student("john","Robinson")  
p3.printname()  
  
*#Program*class person: *#baseclass* def \_\_init\_\_(self,fname,lname):  
 self.firstname=fname  
 self.lastname=lname  
 def printname(self):  
 print(self.firstname,self.lastname)  
  
class student(person): *#Derived class* def \_\_init\_\_(self,fname,lname):  
 person.\_\_init\_\_(self,fname,lname)  
  
x=student("Mike", "Olsen")  
x.printname()  
  
*#Program - using super function and add properties.*class person:  
 def \_\_init\_\_(self,fname,lname):  
 self.firstname=fname  
 self.lastname=lname  
 def printname(self):  
 print(self.firstname,self.lastname)  
  
class student(person):  
 def \_\_init\_\_(self,fname,lname):  
 super().\_\_init\_\_(fname,lname)  
 self.graduationyear = 2019  
  
x=student("mike","Olsen")  
print(x.graduationyear)  
  
*#program-using constructor*class person:  
 def \_\_init\_\_(self,name):  
 print("Inside constructor")  
 self.name=name  
 print("All variables are initialized")  
 def show(self):  
 print("My name is ",self.name)  
  
x=person("Emili")  
x.show()  
  
*#program-constructor*class Employee:  
 def show(self):  
 print("Inside show method")  
  
d=Employee()  
d.show()  
  
*#Program-Non-Parametrized Constructor*class Employee:  
 def \_\_init\_\_(self):  
 self.name="guna"  
 self.address="Krishna nagar"  
 def display(self):  
 print("My name is ",self.name,",I am reside at ",self.address)  
  
emp=Employee()  
  
emp.display()  
  
*#Program-Parameterized constructor*class industry:  
 def \_\_init\_\_(self,name,age,address):  
 self.name=name  
 self.age=age  
 self.address=address  
  
 def showmethod(self):  
 print("Name- ",self.name,"Age- ", self.age,"Address- ",self.address)  
  
i = industry("Shyam ",34,"Mangalapuram")  
i.showmethod()  
i1 = industry("Siva", 23," Natarajapuram")  
i1.showmethod()  
  
*#Program*class student:  
 def \_\_init\_\_(self,name,age=12, std=12):  
 self.name=name  
 self.age=age  
 self.std=std  
  
 def disp(self):  
 print(f"Name:{self.name}\nAge: {self.age}\nStandard: {self.std}")  
  
s1=student("Ram")  
s1.disp()  
  
s2=student("Anjana" , 13,8)  
s2.disp()  
  
*#Program-Constructor chaining*class vehicle:  
 def \_\_init\_\_(self,engine):  
 print("Inside vehicle constructor ")  
 self.engine= engine  
class car(vehicle):  
 def \_\_init\_\_(self,engine,maxspeed):  
 super().\_\_init\_\_(engine)  
 print("Inside car constructor ")  
 self.maxspeed=maxspeed  
  
class electriccar(car):  
 def \_\_init\_\_(self,engine,maxspeed,kmrange):  
 super(). \_\_init\_\_(engine,maxspeed)  
 print("Inside Electric car constructor")  
 self.kmrange=kmrange  
  
ev=electriccar('1500cc',250,750)  
print(f'Engine={ev.engine} , Maxspeed={ev.maxspeed} ,Kmrange={ev.kmrange}')

Ouput:

My name is John ,age is 37

My name is Mary ,age is 35

35

My name is Ram ,age is 35

Amenda johnson

john Robinson

Mike Olsen

2019

Inside constructor

All variables are initialized

My name is Emili

Inside show method

My name is guna ,I am reside at Krishna nagar

Name- Shyam Age- 34 Address- Mangalapuram

Name- Siva Age- 23 Address- Natarajapuram

Name:Ram

Age: 12

Standard: 12

Name:Anjana

Age: 13

Standard: 8

Inside vehicle constructor

Inside car constructor

Inside Electric car constructor

Engine=1500cc , Maxspeed=250 ,Kmrange=750