*#program- accessing private members from public method*class employee:  
 def \_\_init\_\_(self,name,salary):  
 self.name=name  
 self.\_\_salary=salary  
  
 def show(self):  
 print("Name- ",self.name,",Salary- ",self.\_\_salary)  
  
emp=employee("Mary",20000)  
emp.show()  
  
*#program- Name Mangling*class employee:  
 def \_\_init\_\_(self,name,salary):  
 self.name=name  
 self.\_\_salary=salary  
  
emp=employee("Ram",30000)  
print("Name- ",emp.name)  
print("Salary- ",emp.\_employee\_\_salary)  
  
*#Program-Protected Member*class company():  
 def \_\_init\_\_(self):  
 self.\_project="NLC"  
class employee(company):  
 def \_\_init\_\_(self,name):  
 self.name=name  
 company.\_\_init\_\_(self)  
  
 def show(self):  
 print("Employee name : ",self.name)  
 print("Working on project : ",self.\_project)  
  
emp=employee("Amenda")  
emp.show()  
  
*#Program-getters and setters*class student:  
 def \_\_init\_\_(self,name,age):  
 self.name=name  
 self.\_\_age=age  
 def get\_age(self):  
 return self.\_\_age  
 def set\_age(self,age):  
 self.\_\_age=age  
  
stud = student("Gourav",12)  
print("Name- ",stud.name,",Age- ",stud.get\_age())  
print("After setting age")  
stud.set\_age(15)  
print("Name- ",stud.name,",Age- ",stud.get\_age())  
  
*#Program-Information Hiding and conditional logic for setting an object attributes*class student:  
 def \_\_init\_\_(self,name,rollno,age):  
 self.name=name  
 self.\_\_rollno=rollno  
 self.\_\_age=age  
 def show(self):  
 print("Name- ",self.name,",Roll.no- ",self.\_\_rollno,",Age- ",self.\_\_age)  
 def get\_rollno(self):  
 return self.\_\_rollno  
 def set\_rollno(self,number):  
 if number >50:  
 print("Please enter correct roll number")  
 else:  
 self.\_\_rollno=number  
  
s1=student("Mary",123,15)  
s1.show()  
print("After modify")  
s1.set\_rollno(23)  
s1.show()  
  
*#Program- classes and objects*class vehicle():  
 def \_\_init\_\_(self,maxspeed,mileage):  
 self.maxspeed=maxspeed  
 self.mileage=mileage  
  
v=vehicle(140,120)  
print("maxspeed ",v.maxspeed,"mileage ",v.mileage)  
  
*#Program- Bus object that will inherit all of the variables and methods of the parent Vehicle class and display it.*class Vehicle:  
  
 def \_\_init\_\_(self, name, max\_speed, mileage):  
 self.name = name  
 self.max\_speed = max\_speed  
 self.mileage = mileage  
  
class bus(Vehicle):  
 pass  
  
volvo=bus("School volvo",130,150)  
print("Bus name-",volvo.name,",Speed-",volvo.max\_speed,",Mileage-",volvo.mileage)

Output:

Name- Mary ,Salary- 20000

Name- Ram

Salary- 30000

Employee name : Amenda

Working on project : NLC

Name- Gourav ,Age- 12

After setting age

Name- Gourav ,Age- 15

Name- Mary ,Roll.no- 123 ,Age- 15

After modify

Name- Mary ,Roll.no- 23 ,Age- 15

maxspeed 140 mileage 120

Bus name- School volvo ,Speed- 130 ,Mileage- 150