*'''class Employee:  
 # class variables  
 company\_name = 'ABC Company'  
  
 # constructor to initialize the object  
 def \_\_init\_\_(self, name, salary):  
 # instance variables  
 self.name = name  
 self.salary = salary  
  
 # instance method  
 def show(self):  
 print('Employee:', self.name, self.salary, self.company\_name)  
  
# create first object  
emp1 = Employee("Harry", 12000)  
emp1.show()  
  
# create second object  
emp2 = Employee("Emma", 10000)  
emp2.show()'''*class student: #class name and initialization  
  
 def \_\_init\_\_(self, name, percentage): #creating a constructor of object  
 self.name=name #instance variables  
 self.percentage= percentage #instance variables  
  
 def show(self): #instance method  
 print("Name is:", self.name, "and Percentage is", self.percentage)  
  
stud= student("Jessa", 80) #object of class  
stud.show()  
  
stud2= student("Yi", 90) #object of class  
stud2.show()  
  
#Define a class  
  
'''class Person:  
 def \_\_init\_\_(self, name, sex, profession):  
 # data members (instance variables)  
 self.name = name  
 self.sex = sex  
 self.profession = profession  
  
 # Behavior (instance methods)  
 def show(self):  
 print('Name:', self.name, 'Sex:', self.sex, 'Profession:', self.profession)  
  
 # Behavior (instance methods)  
 def work(self):  
 print(self.name, 'working as a', self.profession)'''  
  
  
  
#The complete example:  
  
'''class Person:  
 def \_\_init\_\_(self, name, sex, profession):  
 # data members (instance variables)  
 self.name = name  
 self.sex = sex  
 self.profession = profession  
  
 # Behavior (instance methods)  
 def show(self):  
 print('Name:', self.name, 'Sex:', self.sex, 'Profession:', self.profession)  
  
 # Behavior (instance methods)  
 def work(self):  
 print(self.name, 'working as a', self.profession)  
  
# create object of a class  
jessa = Person('Jessa', 'Female', 'Software Engineer')  
  
# call methods  
jessa.show()  
jessa.work()'''  
  
  
  
#Access of attributes and variables at class and instance level  
  
'''class Student:  
 # class variables  
 school\_name = 'ABC School'  
  
 # constructor  
 def \_\_init\_\_(self, name, age):  
 # instance variables  
 self.name = name  
 self.age = age  
  
s1 = Student("Harry", 12)  
# access instance variables  
print('Student:', s1.name, s1.age)  
  
# access class variable  
print('School name:', Student.school\_name)  
  
# Modify instance variables  
s1.name = 'Jessa'  
s1.age = 14  
print('Student:', s1.name, s1.age)  
  
# Modify class variables  
Student.school\_name = 'XYZ School'  
print('School name:', Student.school\_name)'''  
  
  
#Define and call an instance method and class method  
  
# class methods demo  
'''class Student:  
 # class variable  
 school\_name = 'ABC School'  
  
 # constructor  
 def \_\_init\_\_(self, name, age):  
 # instance variables  
 self.name = name  
 self.age = age  
  
 # instance method  
 def show(self):  
 # access instance variables and class variables  
 print('Student:', self.name, self.age, Student.school\_name)  
  
 # instance method  
 def change\_age(self, new\_age):  
 # modify instance variable  
 self.age = new\_age  
  
 # class method  
 @classmethod  
 def modify\_school\_name(cls, new\_name):  
 # modify class variable  
 cls.school\_name = new\_name  
  
s1 = Student("Harry", 12)  
  
# call instance methods  
s1.show()  
s1.change\_age(14)  
  
# call class method  
Student.modify\_school\_name('XYZ School')  
# call instance methods  
s1.show()'''  
  
  
#Modify Object Properties  
  
'''class Fruit:  
 def \_\_init\_\_(self, name, color):  
 self.name = name  
 self.color = color  
  
 def show(self):  
 print("Fruit is", self.name, "and Color is", self.color)  
  
# creating object of the class  
obj = Fruit("Apple", "red")  
  
# Modifying Object Properties  
obj.name = "strawberry"  
  
# calling the instance method using the object obj  
obj.show()  
# Output Fruit is strawberry and Color is red'''  
  
#Delete object properties  
  
'''class Fruit:  
 def \_\_init\_\_(self, name, color):  
 self.name = name  
 self.color = color  
  
 def show(self):  
 print("Fruit is", self.name, "and Color is", self.color)  
  
# creating object of the class  
obj = Fruit("Apple", "red")  
  
# Deleting Object Properties  
del obj.name  
  
# Accessing object properties after deleting  
print(obj.name)'''  
# Output: AttributeError: 'Fruit' object has no attribute 'name'  
  
  
#Delete object  
  
  
'''class Employee:  
 depatment = "IT"  
  
 def show(self):  
 print("Department is ", self.depatment)  
  
emp = Employee()  
emp.show()  
  
# delete object  
del emp  
  
# Accessing after delete object  
emp.show()  
# Output : NameError: name 'emp' is not defined'''