**4. Write a program to create classes and objects**

**Aim:** The aim of this program is to create class and accessing methods and variables by creating class objects.

**Description:** Python is an object oriented programming language almost everything in Python is an object, with its properties and methods.

A Class is like an object constructor, or a "blueprint" for creating objects .To create a class we class keyword

E.g.: class Student:

Roll no = 11

An object is a real time entity.

E.g. s1 = Student ()

In this program we going to create a Student class and to print his/her name, roll no, 5 subject marks and to calculate total and average and display the result

**Code Implementation:**

class Student:

def s\_info(self):

self.name = input("Enter a Student name : ")

self.reg\_no = int(input("Enter reg\_no : "))

self.sem = int(input("Enter semester : "))

self.section = input("Enter a section : ")

def cal(self):

self.m1 = int(input("Enter maths marks : "))

self.m2 = int(input("Enter stat marks : "))

self.m3 = int(input("Enter java marks : "))

self.m4 = int(input("Enter python marks : "))

self.total = self.m1+self.m2+self.m3+self.m4

self.res = self.total/4

#displaying student information

def display(self):

self.s\_info()

self.cal()

print("\*\* STUDENT INFORMATION \*\*")

print("Name = ",self.name)

print("Reg\_No = ",self.reg\_no)

print("Semester = ",self.sem)

print("Section = ",self.section)

print(" Marks Scored in each subject :")

print("Maths = ",self.m1)

print("Stat = ",self.m2)

print("Java = ",self.m3)

print("Python = ",self.m4)

print("Total marks = ",self.total)

print("Percentage = ",self.res)

if self.res >= 85:

print("Grade : A")

elif self.res >= 75:

print("Grade :B")

elif self.res >= 65:

print("Grade :C")

elif self.res >= 55:

print("Grade :D")

elif self.res >= 45:

print("Grade :E")

else:

print("Grade :Failed")

#creating objects

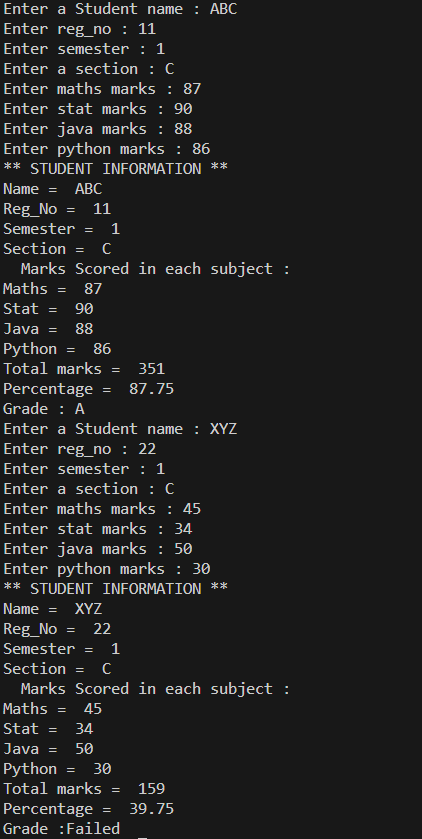
s1 = Student()

s2 = Student()

s1.display()

s2.display()

**Result:**

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