**17.How to create class and object in python?**

**Objective:**

* To see how to create a class and object in python3.

**Process:**

* **Class**

A class is simply a blueprint of a data that defines the characteristics and behavior of its data members.

Python starts with the keyword class followed by the name of the class and colon(:)

Eg.class student():

The body of the class which contains variables, data, and functions.

* **Object**

Object is memory reference of a class.

Used to store data and functions defined inside a class.

Using object we can call the methods that are defined in the class.

Object should be within the class not with in the methods

**Input:**

* Student name and marks.

**Output:**

* Students results according to their marks, whether they are pass or fail.

**Source code:**

#class classname(student)

class Student:

#method1

def \_\_init\_\_ (self,n , m =0 ):

self.name = n

self.marks = m

#method2

def display(self):

print("hi", self.name)

print("your marks", self.marks)

#method3

def calculate(self):

if (self.marks >= 75):

print("you got first class")

elif (self.marks >= 45):

print("you are pass")

else:

print("you are fail")

#get input from the user

n = int(input("how many students marks:" ))

#initialize the loop for many students

i = 0

while (i < n):

name = input("enter the name : ")

marks = int(input("enter the marks: "))

#object creation for student class

s1=Student(name, marks)

#method calling statements

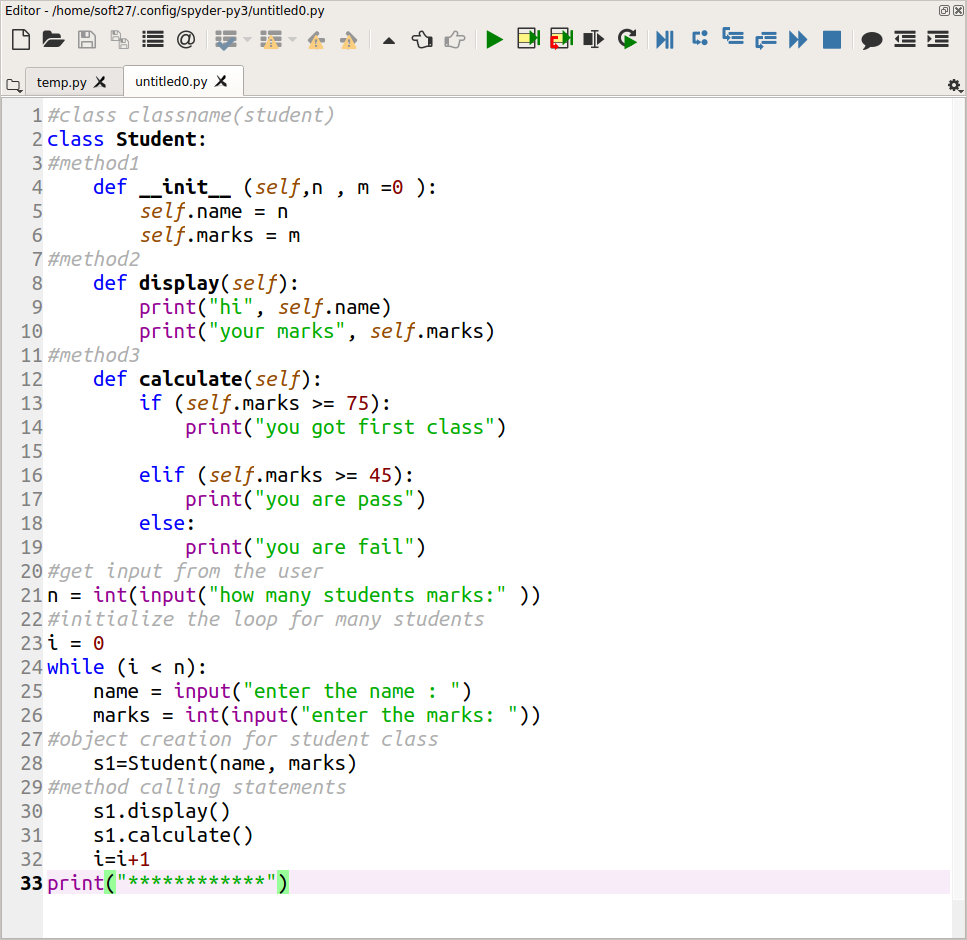
s1.display()

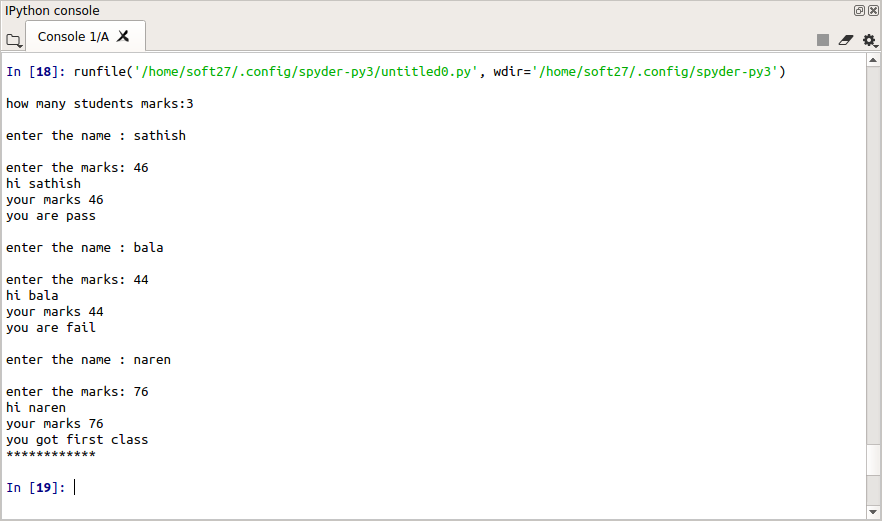
s1.calculate()

i=i+1

print("\*\*\*\*\*\*\*\*\*\*\*\*")

**Screen shots:**

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