

Python Code:

```
#Defining the class
class student(object):

    student_count = 0
#Defining the constructor
    def __init__(self, name, id, grade):
        self.name = name
        self.id = id
        self.grade = grade
        student.student_count += 1

#Calculating the number of students using their object variable
    def getstudentscount(self):
        print('The number of students are', student.student_count)

# Function to get Student name, roll no and grades
    def getstudentdetails(self):
        print("The student details are: ", "Name - " , self.name, ",", "ID -" ,
self.id , ",", "Grades -" , self.grade)

#TransferStudent inherited from student class
class TransferStudent(student):
    def __init__(self, name, id, grades, university):
        student.__init__(self, name, id, grades)
        self.university=university
    def getstudentdetails(self):
        student.getstudentdetails(self)
        print("Transferred from university :",self.university)

#Creating list for Student instances with attributes
StudentList = []
StudentList.append(student("Vamshi", 1279, ['A','A','B']))
StudentList.append(student("Shivam", 2899, ['A','A','B']))
StudentList.append(TransferStudent("Swapna", 1326, ['A','A','B'], "UCD"))
StudentList.append(TransferStudent("Satish", 2613, ['A','A','B'], "IITC"))

#Iterating through student list to display details
for object, item in enumerate(StudentList):
    item.getstudentdetails()
    print("\n")
    if object == len(StudentList)-1:
        item.getstudentscount()
```

Zero Count Output:

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BankAccount.py ICE4_1.py STudent.py numpy2.py
getstudentdetails 4 matches
1 #Defining the class
2 class student(object):
3
4     student_count = 0
5     #Defining the constructor
6     def __init__(self, name, id, grade):
7         self.name = name
8         self.id = id
9         self.grade = grade
10        self.student_count += 1
11
12    #Calculating the number of students using their object variable
13    def getstudentscount(self):
14        print('The number of students are', student.student_count)
15
16    # Function to get Student name, roll no and grades
17    def getstudentdetails(self):
18        print("The student details are: ", "Name : ", self.name, "ID : ", self.id, "Grades : ", self.grade)
19
20    #Function to add a student
21    # def addStudent(self, name, id, grade):
22        # self.name = name
23        # self.id = id
24        # self.grade = grade
25        # self.student_count += 1
26
27    student > __init__()
Run: ICE4_1 ICE4_1
The student details are: Name : Vamshi ID : 1279 Grades : ['A', 'A', 'B']
The student details are: Name : Shivam ID : 2899 Grades : ['A', 'A', 'B']
The student details are: Name : Swapna ID : 1326 Grades : ['A', 'A', 'B']
Transferred from university : UCD
The student details are: Name : Satish ID : 2613 Grades : ['A', 'A', 'B']
Transferred from university : IITC
|
The number of students are 0
Process finished with exit code 0
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