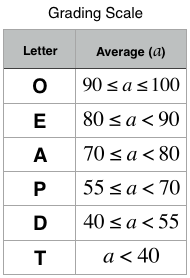
Day12 :Inheritance

**Objective**   
Today, we're delving into Inheritance. Check out the attached tutorial for learning materials and an instructional video!

**Task**   
You are given two classes, *Person* and *Student*, where *Person* is the base class and *Student* is the derived class. Completed code for *Person* and a declaration for *Student* are provided for you in the editor. Observe that *Student* inherits all the properties of *Person*.

Complete the *Student* class by writing the following:

* A *Student* class constructor, which has  parameters:
  1. A string,firstName .
  2. A string, lastName.
  3. An integer, id.
  4. An integer array (or vector) of test scores, .
* A *char calculate()* method that calculates a Student object's average and returns the grade character representative of their calculated average:



**Input Format**

The locked stub code in your editor calls your *Student* class constructor and passes it the necessary arguments. It also calls the *calculate* method (which takes no arguments).

*You are not responsible for reading the following input from stdin:*   
The first line contains firstName, lastName, and id, respectively. The second line contains the number of test scores. The third line of space-separated integers describes scores.

**Constraints**

* 1<=|firstName|,|lastName|<=10
* |id|=7
* 0<=score,average<=100

**Output Format**

*This is handled by the locked stub code in your editor.* Your output will be correct if your *Student* class constructor and *calculate()* method are properly implemented.

**Sample Input**

Heraldo Memelli 8135627

2

100 80

**Sample Output**

Name: Memelli, Heraldo

ID: 8135627

Grade: O

**Explanation**

This student had 2 scores to average: 100 and 80. The student's average grade is(100+80)/2=90 . An average grade of 90 corresponds to the letter grade O, so our *calculate()* method should return the character'O'.

Code:

class Person:

def \_\_init\_\_(self, firstName, lastName, idNumber):

self.firstName = firstName

self.lastName = lastName

self.idNumber = idNumber

def printPerson(self):

print "Name:", self.lastName + ",", self.firstName

print "ID:", self.idNumber

class Student(Person):

# Class Constructor

#

# Parameters:

# firstName - A string denoting the Person's first name.

# lastName - A string denoting the Person's last name.

# id - An integer denoting the Person's ID number.

# scores - An array of integers denoting the Person's test scores.

#

# Write your constructor here

# Function Name: calculate

# Return: A character denoting the grade.

#

# Write your function here

line = raw\_input().split()

firstName = line[0]

lastName = line[1]

idNum = line[2]

numScores = int(raw\_input()) # not needed for Python

scores = map(int, raw\_input().split())

s = Student(firstName, lastName, idNum, scores)

s.printPerson()

print "Grade:", s.calculate()