

## Mock test

**Program(*studentGrading.py*):**

```
#create a class to perform various functions
```

```
class Grade:
```

```
    def __init__(self):
```

```
        self.marks = []
```

```
        self.result = []
```

```
        self.total = 0
```

```
#function to obtain number of students from the user == N students
```

```
def get_marks(self):
```

```
    self.number = int( input( 'Enter how many students:') )
```

```
    for i in self.number:
```

```
        self.marks.append( 'Enter the marks: ')
```

```
#function to calculate the mark and add them in a list
```

```
def calculate_mark(self):
```

```
    self.result = []
```

```
    if self.marks < 0 and self.marks >100:
```

```
        if (self.marks >= 40):
```

```
            self.result.append('Pass')
```

```
        else:
```

```
            self.result.append('Fail')
```

```
    else:
```

```
        self.result.append('Invalid Marks')
```

```
    return self.result
```

```
#function to calculate the total marks
```

```
def total_marks(self):
```

```
    self.total = 0
```

```
    for i in self.marks:
```

```
        total = total + i
```

```
    print('Total marks is: ', total)
```

```
    return self.total
```

```
#function to calculate the average marks
```

```
def average_marks(self):
```

```
    self.average = self.total / self.number
```

```
    print('The average marks is: ', self.average)
```

```
    return self.average
```

```
#function to count the number of students who passed
```

```
def number_of_passed_stu(self):
```

```
    self.pcount = 0
```

```
    for i in self.result:
```

```
        if i == 'Pass':
```

```
            self.pcount = self.pcount + 1
```

```
    else:
```

```
        self.pcount
```

```
    return self.pcount
```

```
#function to count the number of students who failed
```

```
def number_of_failed_stu(self):
```

```
    self.fcount = 0
```

```
    for i in self.result:
```

```
if i == 'Fail':  
    self.fcount = self.fcount + 1  
  
else:  
    self.fcount  
  
return self.fcount  
  
  
#creation of object to access the class methods  
  
obj_grade = Grade ()  
  
obj_grade.get_marks()  
  
obj_grade.calculate_mark()  
  
obj_grade.total_marks()  
  
obj_grade.average_marks()  
  
print('Passed student count: ', obj_grade.number_of_passed_stu)  
print('Failed student count: ', obj_grade.number_of_failed_stu)
```