

Assignment #3 (7 /12/2563)

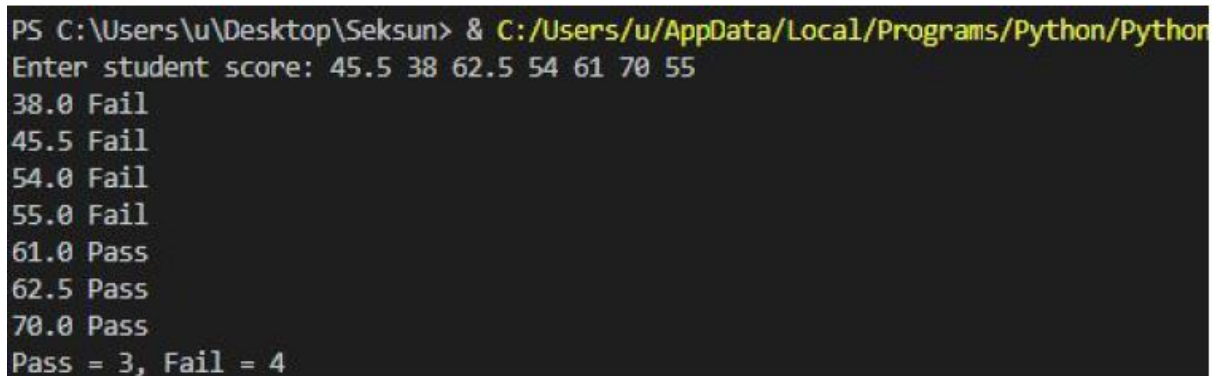
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C1

Python code

```
score = [ float(e) for e in input().split()]\n\nPass = []\n\nFail = []\n\nn = len(score)\n\nif n == 7: Mean = sum(score)/n\n\n    for i in range(0,7):\n\n        if score[i] >= Mean:\n\n            y = score[i]\n\n            Pass.append(y)\n\n            print(score[i], '=', 'Pass')\n\n        else:\n\n            print(score[i], '=', 'Fail')\n\n            x = score[i]\n\n            Fail.append(x)\n\n    print('Pass =', len(Pass), 'Fail =', len(Fail))\n\nelse:\n\n    print('error')
```

Result



```
PS C:\Users\u\Desktop\Seksun> & C:/Users/u/AppData/Local/Programs/Python/Python...
Enter student score: 45.5 38 62.5 54 61 70 55
38.0 Fail
45.5 Fail
54.0 Fail
55.0 Fail
61.0 Pass
62.5 Pass
70.0 Pass
Pass = 3, Fail = 4
```

C2

Python code

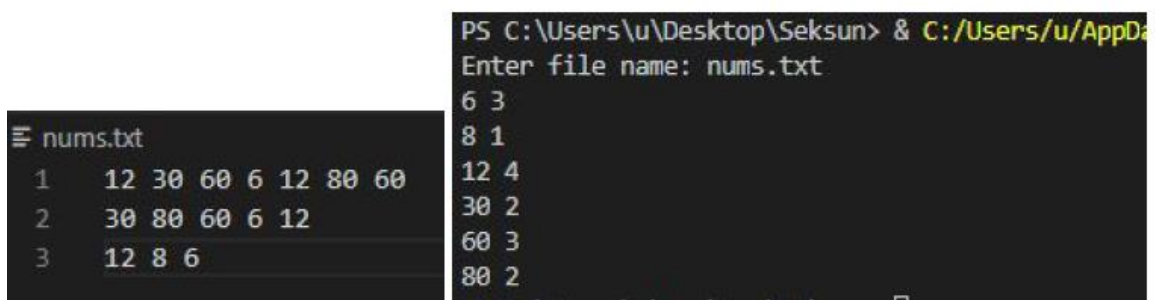
```
infile = open(input('Enter file name: '), 'r')
numList = []

for line in infile:
    for num in line.strip().split():
        numList.append(int(num))

numList = sorted(numList)

for num in list(dict.fromkeys(numList)):
    print(f'{num} {numList.count(num)}')
```

Result



The image shows two side-by-side screenshots. The left screenshot is a file editor window titled 'nums.txt' containing three lines of numbers: '1 12 30 60 6 12 80 60', '2 30 80 60 6 12', and '3 12 8 6'. The right screenshot is a PowerShell terminal window with the command prompt 'PS C:\Users\u\Desktop\Seksun> & C:/Users/u/AppData...'. It shows the user entering 'Enter file name: nums.txt' and the script outputting the frequency of each number: '6 3', '8 1', '12 4', '30 2', '60 3', and '80 2'.

```
PS C:\Users\u\Desktop\Seksun> & C:/Users/u/AppData...
Enter file name: nums.txt
6 3
8 1
12 4
30 2
60 3
80 2
```

C3

Python code

```
inputFile = open(input('Enter input file name: '), 'r')
outputFile = open(input('Enter output file name: '), 'w')
itemList = []

for line in inputFile:
    for i in line.strip().split():
        itemList.append(i)

itemList = sorted(itemList)
start = 0

for round in range(((len(itemList)//5) + 1)):
    stringitem = ''
    if len(itemList) > 5*(round+1):
        for i in itemList[start:5 * (round+1)]:
            stringitem += i+' '
        outputFile.write(stringitem + '\n')
        start += 5
    else:
        for i in itemList[start:]:
            stringitem += i+' '
        outputFile.write(stringitem)

print(f'Output file : {outputFile}')
```

Result

```
PS C:\Users\u\Desktop\Seksun> & C:/Users/u/AppData/Local/Programs/Python/Python310/python.exe C:/Users/u/Desktop/Python/C3/words.py
Enter input file name: words.txt
Enter output file name: sortedwords.txt
Output file : sortedwords.txt
```

sortedwords.txt

```
1  apple apples banana december friday
2  lion monday november orange sunday
3  tiger tuesday
```

words.txt

```
1  lion tiger apple banana
2  friday sunday monday tuesday
3  orange apples
4  november december
```