

CSC 501 HOMEWORK 5

PROFESSOR GODFREY C. MUGANDA

Professors teaching at State U have hired you to write a program that computes statistics for test scores, as well as grades. You need to write a program that asks a professor to enter the number n of scores, and then asks for n scores to be entered. Once that is done, the program sorts and prints out the scores.

After that, the program prints a frequency distribution of the scores, showing all distinct scores, and for each score, how many students attained that score. This frequency distribution must be in increasing order of the scores.

Your program needs to print out the grade to be assigned to each score. State U uses the usual grading scale of A , B , C , D and F , with cut off scores being 90, 80, 70, and 60 respectively.

Here is a sample run. Your program output must match the format shown here.

```
Enter the number of scores: 8
Enter 8 scores separated by spaces: 89 34 89 99 100 75 90 45
The scores in sorted order are: [34, 45, 75, 89, 89, 90, 99, 100]
```

Frequency distribution of scores is as follows:

```
34 occurs 1 times
45 occurs 1 times
75 occurs 1 times
89 occurs 2 times
90 occurs 1 times
99 occurs 1 times
100 occurs 1 times
```

```
Scores that get As:
100 99 90
```

```
Scores that get Bs:
89 89
```

```
Scores that get Cs:
75
```

```
Scores that get Ds:
```

```
Scores that get Fs:
45 34
```

This assignment is due Sunday night at the end of week 8.