LAB 02

QUESTION
1. Write a program that reads student scores, gets the best score, and then assigns grades based on the following scheme:

   > Grade is A if score is >= best - 10
   > Grade is B if score is >= best - 20
   > Grade is C if score is >= best - 30
   > Grade is D if score is >= best - 40
   > Grade is F otherwise

- The program prompts the user to enter the total number of students, then prompts the user to enter all the scores (strictly integers) and concludes by displaying the grades.
- The scores being entered must be stored in a list. You are free to use functions to organize your code and additional data structures to store data. You should try not to duplicate code when possible.
- Please refer to the sample output on how your program should run (i.e., when scores are entered, they must all be entered on the same line as shown in the sample output).
- We are assuming a person will not enter in scores less than 0, scores greater than 100, floating point values, words, or characters.

   SAMPLE OUTPUT 1
   Total number of students: 1
   Enter 1 score(s): 70
   Student 1 score is 70 and grade is A
   The average score is 70.00, a grade of A
   SAMPLE OUTPUT 2
   Total number of students: 3
   Enter 3 score(s): 55 40 70
   Student 1 score is 55 and grade is B
   Student 2 score is 40 and grade is C
   Student 3 score is 70 and grade is A
   The average score is 55.00, a grade of B
   SAMPLE OUTPUT 3
   Total number of students: 2
   Enter 2 score(s): 40 55 70
   Student 1 score is 40 and grade is B
   Student 2 score is 55 and grade is A
   The average score is 47.50, a grade of A
   SAMPLE OUTPUT 4

Total number of students: 2
Enter 2 score(s): 7
Enter 2 score(s): 7 100
Student 1 score is 7 and grade is F
Student 2 score is 100 and grade is A
The average score is 53.50, a grade of F

SAMPLE OUTPUT 5
Total number of students: 6
Enter 6 score(s): 40 56 72 79 85 93
Student 1 score is 40 and grade is F
Student 2 score is 56 and grade is D
Student 3 score is 72 and grade is C
Student 4 score is 79 and grade is B
Student 5 score is 85 and grade is A
Student 6 score is 93 and grade is A
The average score is 70.83, a grade of C

*Please note for sample 3, much as the user decided to enter 3 scores even though they were asked to enter 2, the best score and ultimately the grades were determined based on the first 2 values only. For sample 4, when the user entered less scores than was asked for, they were asked again to enter scores.