PROJECT 1: OPTIMISTIC GRADE CALCULATOR

Due Date: 16 October 23:59

In this project, you should write an assembly code which reads 5 integer exam scores from the user. The code selects the best three out of these five scores and then takes the average of these 3 scores in order to find the average grade of the student.

Example run of the code (red numbers are given by the user):

```
Enter your first score: 20

Enter your second score: 95

Enter your third score: 30

Enter your fourth score: 90

Enter your fifth score: 100

Your average grade is 95
```

- You have to write your code at least using one subroutine. (and so you should use at least one jal command)
- Your code should run exactly in the same way with the example run above.
- First of all you should store the 5 scores given by the user to the stack.
- Then you should apply your algorithm on the data (data=five scores) that you have stored in the stack. You should again use stack for this purpose because we want to increase your capability of using the stack effectively. (The reason for this is that you only have 32 registers which means that for most of the cases you have to learn using memory or stack for such purposes. Suggestion: *Think what you would do if you had to write a code that finds the average of the best three scores out of 40 scores instead of 5 scores. Find the answer and apply to your case where you have only 5 scores.*)
- **This first project is not a group project. Copying or "cooperation" is definitely prohibited.**
- Put comments using "#" sign at the end of **each line** of your code.
- Be sure that your code runs on PCSpim. The codes that do not even run loose lots of grade points.
- Put your resultant assembly code as one file with .s extension under ftp://storage.ku.edu.tr/COURSES/UGRADS/COMP303/HOMEWORK/PROJECT1 folder before the due date. The file should be named as "yourName_yourSurname.s".
- The due date is until the end of October 16 (midnight 23:59). The projects that are uploaded after 23:59 will get 25% and after 00:30 50% and after 00:45 75% grade reduction.