

# CENG113 PROGRAMMING BASICS

## Homework 3

Write a program that performs the following operations to calculate the letter grade of a student for the Programming Basics course.

1. Ask the user to enter the exam, quiz, and homework scores
  2. Calculate the total score
  3. Calculate the absenteeism rate
  4. Display the letter grade
- For the 1st operation, define a function that asks the user to enter the exam, quiz, and homework scores of the Programming Basics course (1 midterm, 1 final, 4 quizzes, and 4 homework scores). This function displays a message that the scores are saved and returns a list of scores.
  - For the 2nd operation, define a function that gets the list of scores as input and calculates the total score using the following formula:

$$total\ score = MS * 0.25 + QS * 0.20 + HS * 0.20 + FS * 0.35$$

*MS : Midterm Score*

*QS: Average Quiz Score*

*HS: Average Homework Score*

*FS: Final Score*

This function displays the total score to inform the user and returns the total score.

- For the 3rd operation, define a function that asks the user to enter the number of absences and calculates the absenteeism rate. This function displays the absenteeism rate to inform the user and returns the absenteeism rate.

*Total number of course weeks: 14*

- For the 4th operation, define a function that gets the total score and absenteeism rate as input. This function displays the letter grade according to the total score and absenteeism rate variables. If the absenteeism rate is greater than 0.25, the letter grade must be NA. Otherwise, the letter grade is determined according to the table below.
- In the main function, call the defined functions in order to determine the letter grade.

Total Score	Letter Grade
90 - 100	AA
85 - 89	BA
80 - 84	BB
75 - 79	CB
70 - 74	CC
65 - 69	DC
60 - 64	DD
50 - 60	FD
0 - 49	FF