

**Assignment 5 (Files and Methods), Due date is Thursday March 3<sup>rd</sup>, 11:59 PM**

**Part1 (15 Points):** Write a Java program for a robot that reads tasks from a log file (logFile.txt) that have been already conducted by the robot so far. The tasks are displayed on an LED screen that is attached to the robot's head. Tasks are displayed on the screen sorted by their priority. Priority is represented as an integer number from 1 to 3 such that 1 for highest and 3 for lowest. Note that the log file could contain an arbitrary number of tasks stored in the following format (5 lines for each task):

- ✓ Task description (only one line),
- ✓ time (when the task was received),
- ✓ duration (how long did it take to complete the task in minutes)
- ✓ Date of the task (MM/DD/YYYY)
- ✓ The priority of the task (1 to 3)

The program first prompts the user to enter a **password** that must be compared against a pre-stored list of valid passwords saved in a text file (**passwords.txt**). If the entered password is found in the password's file, then the program reads the tasks from the logfile.txt. Otherwise, the program notifies the user about the **incorrect password** and terminates. The password file has an arbitrary number of passwords. **Example:**

**The password's file (passwords.txt)**

**A\*bUwS#@2X19**

**Pass\*K\$e8Y TokenT2w**

logFile.txt	The output on the screen ( <b>Must be in the same format</b> )
Make a fresh coffee 06:31 AM 7 Minutes 06/29/2015 3 Get me the phone 6:39 AM 0.25 Minutes 06/29/2015 2 Bring me today's newspapers 06:40 AM 1 Minutes 06/29/2015 2 Call 911, heart attack 06:57 AM 0.35 Minutes 06/29/2015 1	Number of the tasks 4. ----- Task 1: description: Call 911, heart attack Time: 06:57 AM Duration: 0.35 Minutes Date: 06/29/2015 Priority: 1 ----- Task 2: description: Get me the phone Time: 06:39 AM Duration: 0.25 Minutes Date: 06/29/2015 Priority: 2 ----- Task 3: description: Bring me today's news papers Time: 06:40 AM Duration: 1 Minutes Date: 06/29/2015 Priority: 2 ----- Task 4: description: Make a fresh coffee Time: 06:31 AM Duration: 7 Minutes Date: 06/29/2015 Priority: 3

**Note:** Please use the attached files. Do not create new files.

## Assignment 5, CS II

### Part2 (15 Points):

Write a java program that stores 100 random integer numbers between 1 and 500 in a file “**intData.txt**”; then the program is expected to perform all the following tasks.

- 1- Create a static method/function to generate and store the target numbers in the file.
- 2- Create a static method/function to print all prime numbers.
- 3- Create a static method/function to read “**intData.txt**” and store all odd numbers into a new file “**oddNumbers.txt**” and all even numbers into a new file “**evenNumbers.txt**”.
- 4- Main method to call all functions

### Note:

- Forgetting to submit the work is not a professional excuse. Please avoid this approach. A better strategy is to start working as soon as possible and plan to show your work to your instructor if needed before the deadline for some recommendations and advice.