# Lab Assignment 8 – Text Processing

## Part 1:

1. Create a new Java project called **Lab8A** and a class named **Lab8A**
2. Inside this project create a class called **ClassStatistics.**
3. Delete everything from this class and copy the code from **Lab8A.txt** into it.
4. The constructor should receive one string parameter that holds the name of the text file, and it should set **filename** = to the parameter.
5. Look for all the **//\*To Do** comments in both classes and follow those instructions.
6. Back in the main class:
   1. Declare and instantiate a new **ClassStatistics** object named **robbie**, sending “TestGrades.txt” as a parameter.
   2. Call the **readFile** method for **Robbie** (no parameters).
   3. Call the **statistics** method for **Robbie** (no parameters).
   4. Call the **avgClassScores** method for **Robbie** (no parameters).

## Part 2:

1. Create a new Java project called **Lab8B** and a class named **Lab8B**
2. Inside this project create a class called **PasswordChecker**, which should have the following.
   1. A String instance variable named password.
   2. A constructor that accepts one string as a parameter and puts it into the instance variable.
   3. A bool method named **checkPassword** that returns a true if it is valid, and false otherwise. The rules for a password are:
      1. It must be at least 8 characters long
      2. It must have at least one number in it.
      3. It must have at least one of the following characters: ! & \* % $
      4. It cannot have two identical characters beside each other. (Ex – Their8WWorld is invalid because of the 2 WW beside each other.)
3. Back in the main method of the outer class:
   1. Ask the user to enter a password
   2. Declare and instantiate a **PasswordChecker** object (with a name of your choice) and send in the input password as the parameter.
   3. Call **checkPassword** for the object and print the result with a label.