

Lab 6: Text Processing

UNK CSIT 150 Object Oriented Programming

Objectives

- Practice parsing a string
- Practice using the Character wrapper class
- Practice using StringBuffer

General Requirements

In this lab, you must write your code following the proper programming style. The bottom line is:

- Use *indentation* to show the logical structure of your code
- Use blank lines to separate code blocks and give each code block a comment
- Give documentation comment to the class and each method

Programming Practice

Imagine that you are developing a software package that requires users to enter their own passwords. Your software requires that users' passwords meet the following criteria:

- The password should be at least six characters long.
- The password should contain at least one uppercase and at least one lowercase letter.
- The password should have at least one digit and one special character. (A special character is not alphabetic and is not a digit).
- The password should not be in the array of not allowed passwords. In general, this array may include several words, or be null. For testing purposes, do not allow passwords to be one of the following strings: "Password1", "Mypassw0rd".

Ask for the user name and password. Keep asking for a password until the user enters a password that meets the criteria above.

Output the username and the password. Then, output the user and the hidden password "*****". Add Javadoc comments to this program.

Bonus 5 points: Encrypt the password as follows:

- Replace each character with the ASCII character that follows it. (If the character is 'a', replace it with 'b'.)
- Reverse the entire password.

Output the username and original password and output the username and its encrypted version.

More Bonus 5 points: ask the user to enter an encrypted password, and using a decrypt method, verify if it is the original password or not.

Report to the Instructor

Before you leave, show the instructor

- The source code
- How the code runs
- The generated technical documents