

CSCI 111 -- Computer Science I

Coding Practical 3

Objectives:

- Create a Java class according to instructions below
- Using Loops, Decision Structures, and methods
- User input and Reading from a text file

Since this is a coding practical, you must work by yourself. Do not seek help from other students. The lab TAs can provide assistance on the practical, but if they do, points will be deducted. You will need to develop a Java class according to the instructions below. After you finish, submit your work to Blackboard. All work must be accomplished using a Text Editor and a CLI (command line interface – like command prompt) or IntelliJ.

Introduction

For this practical, you will write methods to verify passwords. Your program will read several passwords from a text file. After testing a password, your program will output if the password is valid or not.

Program Requirements

- Open a text editor or IntelliJ and create a new Java class named CS111_CP3
- Output a welcoming message stating what the program does.
- Ask for and store the users name.
- Ask for and store the filename and extension
- Create a loop to read through the text file
 - Pass each password, one password at a time, to the methods described further below.
 - Each method should return some value that signifies whether the password passes its verification or not.
 - Before passing the password to the next method, it must pass the pervious methods validation.
 - Output the password and whether it is valid or not
- Once all the passwords are validated, close the file
- Output a good-bye message using the users name and a nice/funny message for the end of the program.

The other methods in the class:

Verify the length:

The method should receive a password.

Test the length of the password. If it is 9 characters or longer, it is valid. If it is not long enough, it is not valid.

The method should return some value that signifies that it is valid or not.

Verify a number: 0 - 9

The method should receive a password.

Check each character of the password to see if there is a number or not. If there is a number it is valid. If there isn't a number it is not valid.

The method should return some value that signifies that it is valid or not.

Verify a symbol: ! @ # \$ % ^ & * ()

The method should receive a password.

Check each character of the password to see if there is one of the symbols above or not. If there is a symbol it is valid. If there isn't a symbol it is not valid.

The method should return some value that signifies that it is valid or not.

Example output:

Welcome to the password verifier!

I will check each password read from a text file and verify if it is valid or not.

Enter your name

Tina

Enter the name of the text file and file type to read from

passwords.txt

The password 123456 is NOT valid

The password Anutr!7262 is valid

*** And so on through the data from the text file ***

Good-bye Tina! Make good passwords.

Be sure to submit your work to Blackboard or you will not receive a grade.