

Assigned Date: 9/17

Date Due: 9/27

DO NOT share your answers with anyone. DO NOT collaborate on completing work with anyone. DO NOT use the Internet to search for solution to assignments. DO NOT pay anyone to write your code. Failure to meet this requirement leads to a violation of the academic integrity principles.

Helper File: See the helper files located under the assignment link where you picked up this assignment file for a sample question and answer.

Grading Criteria File: See the grading criteria file under the assignment link where you picked up this assignment file for a sample question and answer.

Objective: Demonstrate your understanding of Java selection structure. This assignment is based on the material covered in **chapter 4** of your textbook.

Assignment: Write a Java program to display a business card. The program will ask for a password and if the password is correct, ask for the person's first name, last name, title, department, office phone number, mobile phone number, email address, and the office mail code (one character code). Generate a random number between 10.1 and 1000.1 and display the number with 2 digits after the decimal point on the business card. Also, display the LOG base 10 of the random number and the number raised to power of 3. Display these numbers with 4 digits after the decimal point.

Process and additional criteria:

- Assume the correct password is **java**. Password is case sensitive.
- If the password is incorrect, issue an error message and terminate the program.
- If the email address does not have an @ sign in it, show the error code: Incorrect email address instead of the given email address.
- Do not use the System.exit() method to terminate the program.
- Pick the most suitable data type for your variables.
- The printf method covered in chapter 4 could be of help in displaying number with a certain number of digits after the decimal point.

Submit your Java file. Use the file format: **firstNameLastNamecit130_hw5.java** for your file name. NOTE: Java class names must begin with a capital letter (i.e., FooBarCit130_hw3.java). Submit your file to the assignment dropbox in Canvas. The following is a sample run of the code. Make sure to fully test your program. **Your processing must be VERY similar to the sample run.** Note the vertical bar (|) at the beginning of the lines. Don't forget the first and last line of * and dashes.

SAMPLE RUN:

Enter your password: Java
ERROR – Invalid password – the program will terminate
Enter your password: java
Enter your first name: Alan
Enter your last name: Turing
Enter your title: Professor
Enter your department: Computing & Information Technology
Enter your office phone number: 505-555-5151
Enter your mobile phone number: 505-555-5152
Enter your email: alan.turing@genious.com
Enter your office mail code (one character code): H

Here is your official business card:

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*-----*
|
| Alan Turing
| Professor
| Computing & Information Technology
| Office Phone: 505-555-5151
| Mobile Phone: 505-555-5152
| alan.turing@genious.com
| Mail code: H
| Your assigned random number: 120.88
| The log base 10 of your random number is: 2.0824
| The random number raised to the power of 3 is: 1766295.4655
*-----*
```

I have not shown the test case for the invalid email address, but I hope it is self-explanatory.