DT211C/1 Programming Assignment #1

Submission Deadline: Sunday, November 11th, 2018 (23.59 GMT)

Requirements:

You are required to develop a program that will operate on an ATM machine for a bank. Your program should allow bank customers to manage their PIN. The PIN is any 4-digit number. You can assume that the default PIN has been initially assigned the number: **1234**

Your program should be menu-driven and must display a simple menu when run. The menu should include the following options:

1. Enter PIN and verify correct
2. Change PIN
3. Display the number of times the PIN was entered (i) Successfully (ii) Incorrectly
4. Exit Program

Features to include:

1. The customer should be asked to select an option from the menu. After selecting an option, your program must do the following:

    - If they select option 1, they should be asked to enter their PIN. Your program must then verify and show whether it is correct or incorrect.

    - If they select option 2, they should be allowed to change their PIN. When they enter the new PIN, your program must verify the new PIN by asking the customer to re-enter this new PIN. This will verify that the new PIN entered is correct and no errors were made. If there are any differences and the verification fails, your program must display an appropriate error message and the original PIN should remain the same.

    - If they select option 3, your program should show the number of times the PIN was entered **both** correctly and incorrectly.

    - If they select option 4, your program should terminate gracefully, i.e., end.

2. Your program should continually run and re-display the main menu after each option has completed, i.e. start over again. Only when the customer enters option 4 (i.e. Exit program option), should your program terminate.
3. The program **should** take account of input errors by the user and display appropriate error messages.

Submission details:

1. Submit your program using the assignment listed in the Programming module in Webcourses. This must be submitted on or before Sunday, November 11th, 2018 (23.59 GMT).
2. Extra marks will be awarded for well written code (comments, layout, indentation, whitespace, good use of brackets, etc.,).

Note: You are required to demo your program in the lab within 2 weeks following submission. Failure to demo your program will result in a zero-mark awarded.

Late submissions (within 1 week) will be marked out of 50%. No submissions accepted after 1 week and a zero-mark awarded.

NB - This is an individual assignment and **NOT** a group one. Do your own work and do not copy the work from a fellow student. Any assignments submitted which are found to be copied will result in both students failing the assignment. Also, any students found to provide their work to other students will fail this assignment. Suspected copying or plagiarising of another piece of work will be dealt with by the DIT code of ethical conduct.