Due: Thursday, 02-18-2015, 11:59 pm

1. Problem Description

In this assignment, you have two options (**you are supposed to do ONLY ONE of problems, NOT both**):

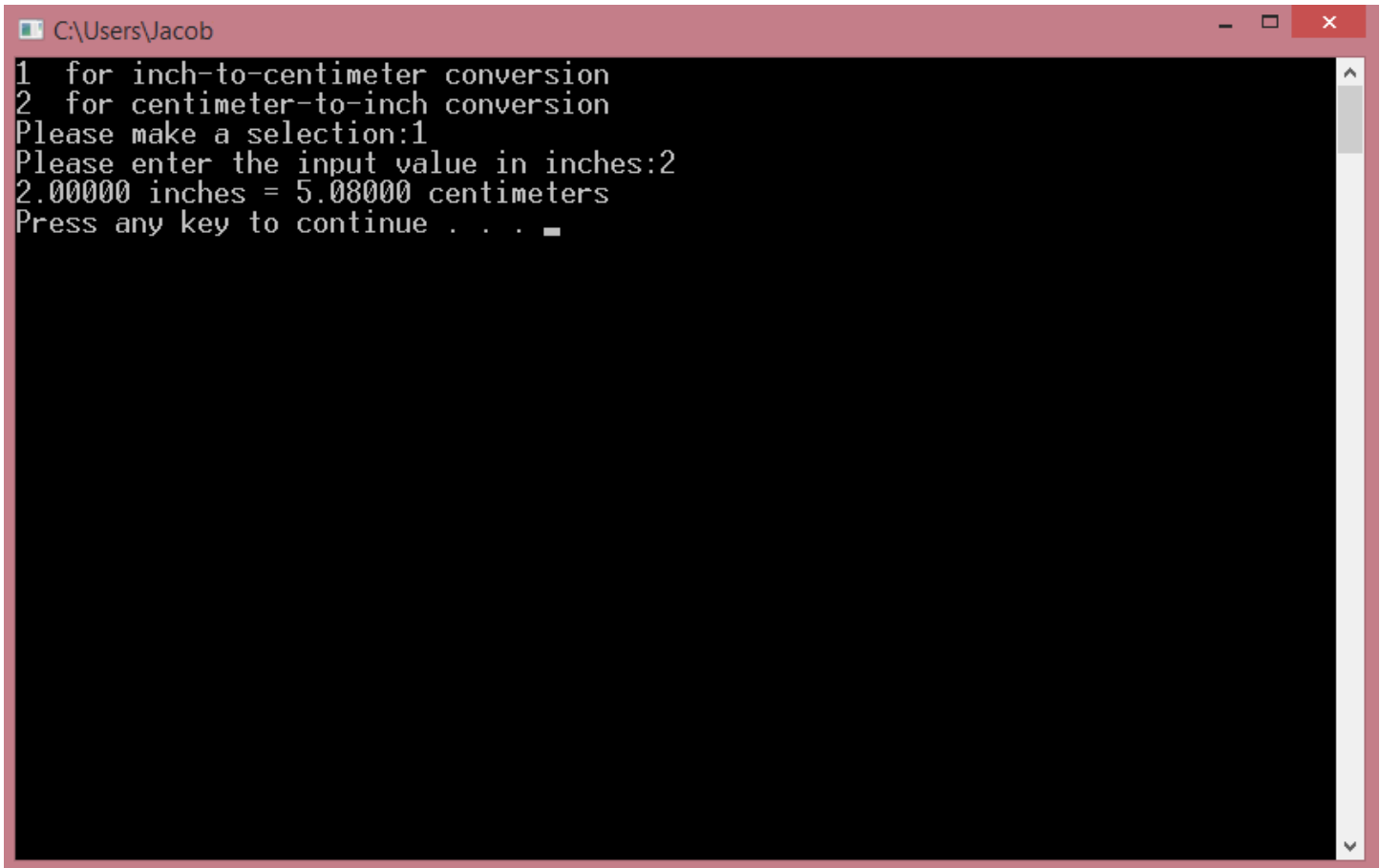**Problem 1**: You will develop and implement a program that allows the user to

i) convert inches to centimeters and
ii) convert centimeters to inches.

Problem 12: You will develop and implement a program that allows the user to

i) convert Fahrenheit to Celsius and
ii) convert Celsius to Fahrenheit.

The primary objective of this assignment is for you to demonstrate use of the branching mechanisms. The program begins by displaying a list of two options presented to the user. The program then displays a prompt asking the user to make a choice. Then, the user is prompted to enter the value to be converted. The program then computes the equivalent value and prints a final line of output containing both values (both the entered and the computed).
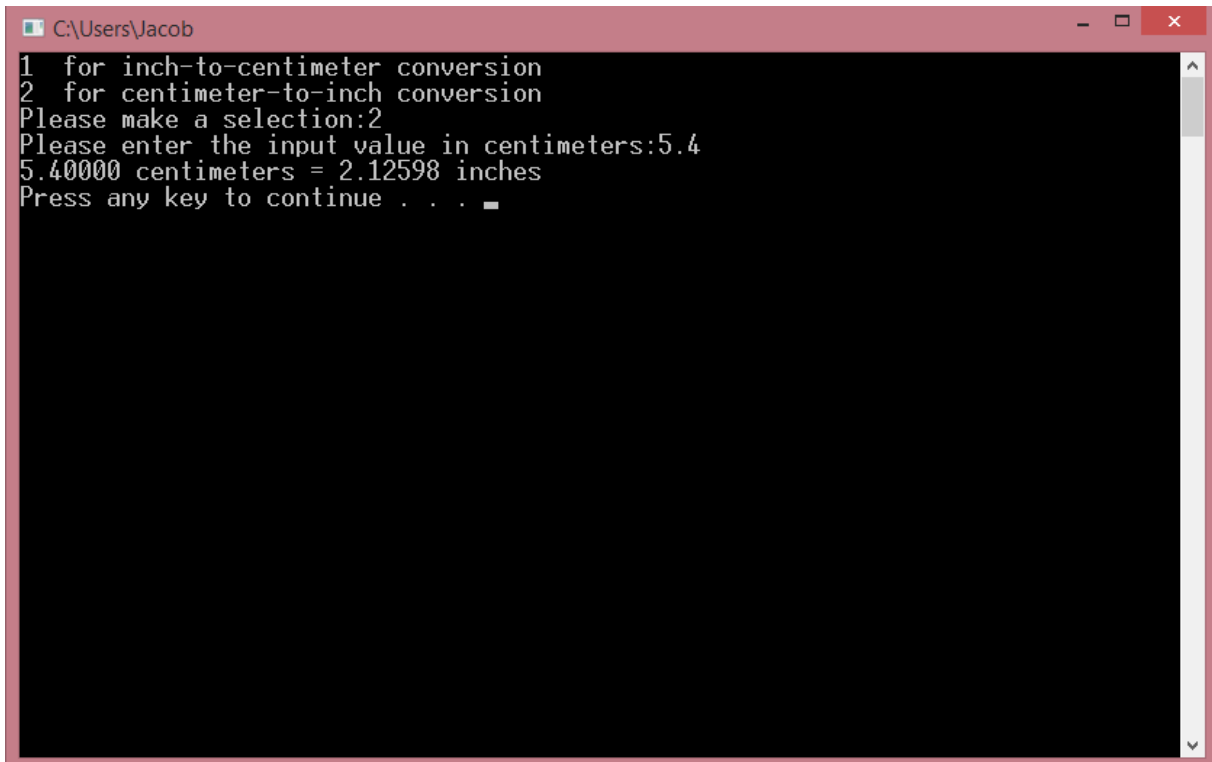
Assuming that **Problem 1** is chosen, the following outputs were produced by running the program on 3 separate occasions:


```
C:\Users\Jacob
1  for inch-to-centimeter conversion
2  for centimeter-to-inch conversion
Please make a selection:1
Please enter the input value in inches:2
2.00000 inches = 5.08000 centimeters
Press any key to continue . . .
```
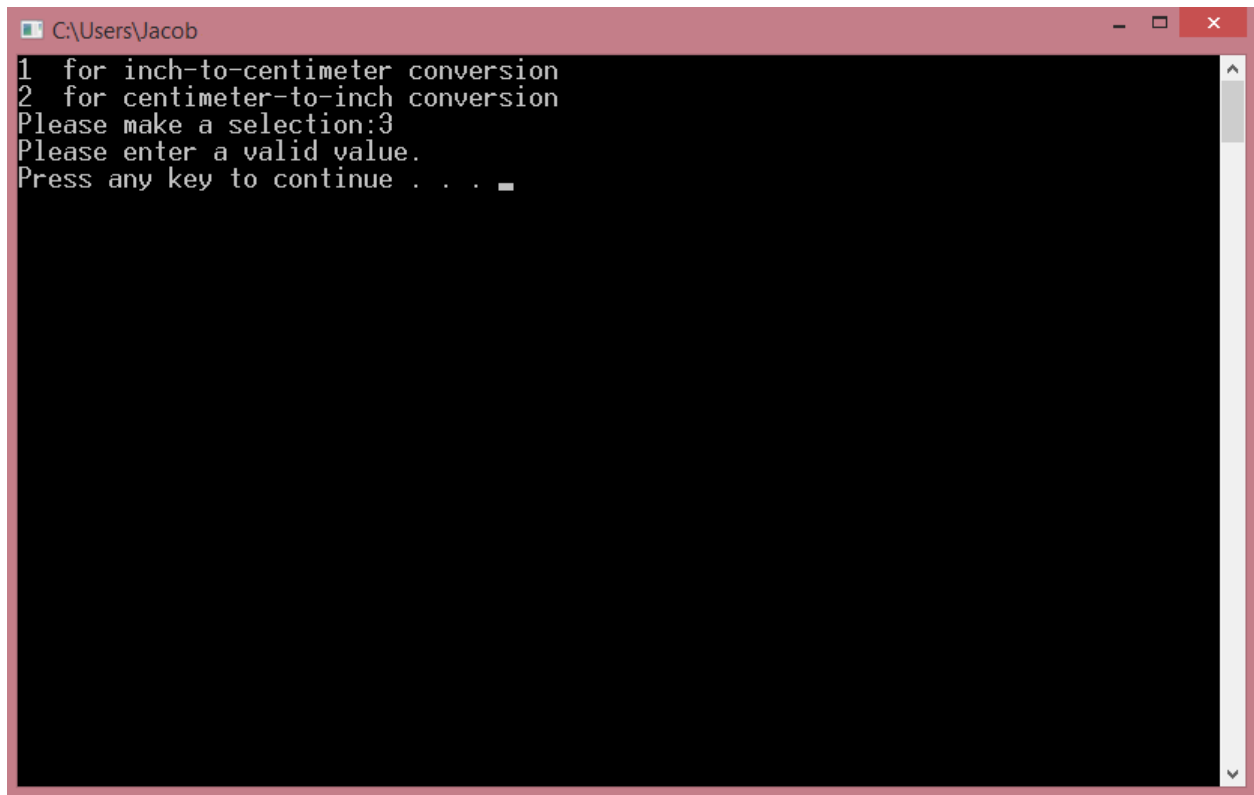
Test 1 (On Windows)

```
1  for inch-to-centimeter conversion
2  for centimeter-to-inch conversion
Please make a selection:2
Please enter the input value in centimeters:5.4
5.40000 centimeters = 2.12598 inches
Press any key to continue . . .
```

Test 2 (On Windows)

If the user makes an entry that is not valid, print out a statement that warns the user and terminates the program.


```
1  for inch-to-centimeter conversion
2  for centimeter-to-inch conversion
Please make a selection:3
Please enter a valid value.
Press any key to continue . . .
```

Test 3 (On Windows)

Please note, you may design a better user interface for the assignment.

2. Grading

A correct solution: worth 100 points

Deductions:

ERROR	DEDUCTED
Program cannot be compiled	40
Program terminates unexpectedly during runtime	40
User interface does not have required information	5
No prompt for entering invalid data	10
Code is not commented	10
Proper indentation is not used	20
Proper variable types are not used	5
Correct output is not displayed	20
Correct conversion logic is not used	20

1. Feel free to discuss ideas and implementations with your classmates, however **DO NOT** share code.

2. If you have a question about the assignment, do not wait until the last minute to ask.

3. Normal deductions for late submissions will be in effect. Please see Assignment Guidelines.

4. **ANY** kind of plagiarism or cheating, will result in a grade of 0.