Summer 2016, SFU Burnaby
Instructor: Diana Cukierman
Assignment #1, “Distances in marathon training” Sample runs

NOTES:

- *What the user typed is underlined and in bold in these sample runs below*
- *You are recommended to test values that are very simple and also border cases to easily double check the correctness of the calculations*

```
>>> ================================ RESTART ================================
>>>
-----------------------------------------------------------------
Welcome to the CMPT 120  "Runner distances" system!
You will be able to calculate the distance between two locations

Please follow the system prompts
-----------------------------------------------------------------

Please provide the data for the first runner

number of kilometers (km): 1
number of meters (m) (between 1 and 999 inclusive): 1
number of centimeters (cm) (between 1 and 99 inclusive): 1

Please provide the data for the second runner

number of miles (mi): 1
number of yards (yd) (between 1 and 1759 inclusive): 1
number of feet (ft) (between 1 and 2 inclusive): 1

     TRACE printing to best follow the execution
     First runner all in cm is: 100101 cm

 FIRST RESULT: distance of second runner in ft and in cm:
 ---------------------------------------------------------
 The  second runner all in ft is: 5284 ft
 The second runner all in cm (1ft = 30.48 cm) is: 161056.32 cm

 SECOND RESULT: difference between the two runners in cm is: 60955.32
 ---------------------------------------------------------

 THIRD RESULT: The difference is also expressible as:
 ----------------------------------------------------
  0 km 609 m 55 cm

End of the program! Bye!
>>> ================================ RESTART ================================
>>>
-----------------------------------------------------------------
Welcome to the CMPT 120  "Runner distances" system!
You will be able to calculate the distance between two locations

Please follow the system prompts
-----------------------------------------------------------------

Please provide the data for the first runner
```

```
number of kilometers (km): 0
number of meters (m) (between 1 and 999 inclusive): 0
number of centimeters (cm) (between 1 and 99 inclusive): 1

Please provide the data for the second runner

number of miles (mi): 0
number of yards (yd) (between 1 and 1759 inclusive): 0
number of feet (ft) (between 1 and 2 inclusive): 1

     TRACE printing to best follow the execution
     First runner all in cm is: 1 cm

 FIRST RESULT: distance of second runner in ft and in cm:
 --------------------------------------------------------
 The  second runner all in ft is: 1 ft
 The second runner all in cm (1ft = 30.48 cm) is: 30.48 cm

 SECOND RESULT: difference between the two runners in cm is: 29.48
 ----------------------------------------------------------

 THIRD RESULT: The difference is also expressible as:
 ---------------------------------------------------
  0 km 0 m 29 cm

End of the program! Bye!
>>> ================================ RESTART ================================
>>>
-----------------------------------------------------------------
Welcome to the CMPT 120  "Runner distances" system!
You will be able to calculate the distance between two locations

Please follow the system prompts
-----------------------------------------------------------------

Please provide the data for the first runner

number of kilometers (km): 10
number of meters (m) (between 1 and 999 inclusive): 10
number of centimeters (cm) (between 1 and 99 inclusive): 10

Please provide the data for the second runner

number of miles (mi): 1
number of yards (yd) (between 1 and 1759 inclusive): 1
number of feet (ft) (between 1 and 2 inclusive): 1

     TRACE printing to best follow the execution
     First runner all in cm is: 1001010 cm

 FIRST RESULT: distance of second runner in ft and in cm:
 --------------------------------------------------------
 The  second runner all in ft is: 5284 ft
```

```
 The second runner all in cm (1ft = 30.48 cm) is: 161056.32 cm

 SECOND RESULT: difference between the two runners in cm is: 839953.68
 ------------------------------------------------------------

 THIRD RESULT: The difference is also expressible as:
 ----------------------------------------------------
  8 km 399 m 53 cm

End of the program! Bye!
>>>
```