COMP 10280
Programming I (Conversion)

Practical Sheet 5
Thursday, 5 October 2017

1. Write a program that takes as input an integer and prints out a message if the number is negative (Use the `if` construct).

   Save this program as `p5p1.py`.

2. Write a program that takes as input an integer and prints out whether the number is non-negative or not (Use the `if ... else` construct).

   Save this program as `p5p2.py`.

3. Write a program that takes as input a floating-point number and prints out whether the number is positive, negative or equal to 0 (Use the `if ... elif ... else` construct).

   Save this program as `p5p3.py`.

4. Write a program that takes as input an integer and prints out one of the following messages indicating whether the number is in one of the specified ranges:

   - Number is equal to 0
   - Number is greater than 0 and less than or equal to 20
   - Number is greater than 20 and less than or equal to 40
   - Number is greater than 40 and less than or equal to 60
   - Number is greater than 60 and less than or equal to 80
   - Number is greater than 80 and less than or equal to 100
   - Number is greater than 100

   If the number entered is less than 0, a message should be printed out to that effect.

   Save this program as `p5p4.py`.

5. Write a program that takes as input a string and checks whether the string entered is the name of a town or city known to the program. The towns and cities should include: Dublin, Belfast, Cork, Limerick, Derry, Galway, Lisburn, Kilkenny, Waterford and Sligo. If the name of one of these towns or cities is entered, the program should print out the string "You entered x. x is in y.", where x is the name of the town or city and y is the province (Ulster, Munster, Leinster or Connacht) in which the town or city is situated. If the string entered is not recognised, the message "Sorry, I didn't recognise that name." should be printed out.

   Save this program as `p5p5.py`.

Please upload your work to the Moodle site before Sunday evening.

You should keep a copy of your programs for your portfolio.