

COMP 10280 Programming I (Conversion)

Practical Sheet 5
Dé Máirt, 26 Meán Fómhair 2023

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 Brightspace site before Wednesday
evening.**

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