

COMP 10280 Programming I (Conversion)

Practical Sheet 2
Dé Máirt, 21 Meán Fómhair 2021

1. Write a program that uses a single `print` command with a number of arguments to print to the screen the strings "Hello," and "world." The output should include a space between the comma and the word "world". Save your programme as `p2p1.py`.
2. Write a program that uses a single `print` command with a single argument to print to the screen the concatenation of the strings "Hello," and "world." Again, the output should include a space between the comma and the word "world". Save your programme as `p2p2.py`.
3. Write a program that assigns to a variable the concatenation of the strings "Hello," and "world." and includes a space between the comma and the word "world". The program should then print out the value of this variable. Save your programme as `p2p3.py`.
4. A string in Python is a sequence of characters. You can access the characters one at a time using the *index*, an expression in square brackets. The index indicates which letter is required from the string. For example, consider the following code segment:

```
animal = 'elephant'  
letter = animal[1]
```

Use different values for the index and use the `print` command to print out the individual letters selected. Ensure that you understand the behaviour of the indexing. Submit examples of your experimentation as `p2p4.txt`.

5. In Python, a segment (substring) of a string is called a *slice*. Selecting a slice is done in a similar way to selecting a character, for example:

```
animals = 'herd_of_elephants'  
seg = animals[x:y]  
print('Segment is: ', seg)
```

where `x` and `y` are replaced by integers (indexes).

Experiment with different values of `x` and `y`. For example:

- (a) What happens when `x` and `y` are the same?
- (b) What happens when `x` is greater than `y`?
- (c) What happens when `x` is omitted?
- (d) What happens when `y` is omitted?
- (e) What happens when both `x` and `y` are omitted?

Submit your answers as `p2p5.txt`.

**Please upload your work to
the Brightspace site before Sunday
evening.**

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