C4M Workshop (Level 2) Week 3

1 Lists and Loops

1. Write a program to take in 10 integers from the input, and display the 10 integers in increasing order
2. Write a program to first take in 3 integers from the input, store them in a list, then double every integer in the list, and the print the list.

2 Swapping Variables

1. Suppose we have a list of measurements. Write a program to find the two largest measurements. First, use `sort()` or `sorted()` Then, write the program while avoiding `sort()` and `sorted()`

3 Strings

1. Write a function that takes in a string containing the patient's description of their symptoms, and outputs `"your nose is runny"` if the string contains `"runny nose"`, `"your eye is runny"` if the string contains `"runny eye"` etc. That is, the function finds the word that comes after runny, and uses that for the output.
2. (An explanation of html files will be given in class)

   You can read files from webpages to strings as follows:

   ```
   import urllib.request
   f = urllib.request.urlopen("http://www.cs.toronto.edu/~guerzhoy/180/lab9.html")
   page = f.read().decode("utf-8")
   f.close()
   print(page)
   ```

   The URL for a Yahoo search for ‘‘`common cold"` is:

   `https://ca.search.yahoo.com/search?p=common+cold&fr=yfp-t-715`

   Write a Python function that figures out the number of search results for a query on yahoo.ca.

   Now, write a program that compares the number of hits on two competing queries (e.g., “I have a headache” vs. “My nose is runny”)