CSCA20 Week 7: Working with files

- Downloading data
  Load the data(txt, csv…) in the same directory as your python file otherwise you cannot find it☹
  Columns in text files are usually separated by blank spaces.
  Columns in csv files are separated by ', '.
- Opening a file (2 ways) opens the file with a given filename and returns a file handler f
  - With command: opens the file with a given filename and returns a file handler f
    with open (filename) as f:
        do stuff
  - Open command(NOT RECOMMANDED): can take r, w, a
    f = open(filename, 'r ')
    do stuff
    f.close()
- Because text files are sequences of lines of text, we can use the for loop to iterate through each line of the file.
- A **line** of a file is defined to be a sequence of characters up to and including a special character called the **newline character** which is $'\backslash n'$. If you print a string that contains a newline you will not see the $'\backslash n'$.
- Reading a file
  - *line = f.readline()* - read 1 line from the file in to a string called line
  - *whole_file = f.read()* -read the whole file into a single string whole_file
  - *list_lines = f.readlines()* - read the whole file into a list, with each element being one line of text
- Writing to a file
  - Will add characters to the end of a file that has been opened for writing.
    f.write(text) – add text to the end of the file