Lab assignment 9

- Develop a program to accept N integers from the user and sort them. Display the sorted list. Define functions called Input(), Sort() and Output().
- Modify the Input() function of the above program to now read the N integers from a plain ASCII file. The input file and the number of elements should be accepted as command line arguments from the user. If arguments are not provided or are not as expected, print an appropriate error message. Sample input files are provided in moodle.

  Note: Use the command `wc` to determine the number of lines in the file, and use `cat` to display the contents of the file.

  Use the command `tar -zxvf assign9_inputfiles.tar.gz` to uncompress the input files.
- Modify the student marks tracking system from Assignment 7. The student record is as follows:
  - name (string)
  - roll-number (alphanumeric)
  - % marks in physics (floating point)
  - % marks in mathematics (floating point)
  - % marks in biology (floating point)

    The program should accept one of two command line arguments:

    -c (for create) will create records for N students and store them as a binary file. You can assume a fixed name 'student.dat' for the file.

    -v (for view) will display the student records, formatted in the appropriate manner.

    Print an appropriate error message if the arguments are not as expected.
- Develop a program which accepts a plain ASCII file of integers, and print the unique ones (ie. avoid repetitions.) The input file is to be provided as a command line argument. The input file has one integer per line. Some test case input files are also uploaded in moodle.

  Hint: it will be useful to first sort the input integers before attempting to find the unique ones.