## Non-Textbook Lab 10: Number of Bicycles (30 pts)

## **Objectives:**

- 1. Practice reading data files
- 2. Performing math calculations
- 3. Printing output

## Steps:

- We will ask you and your classmates to write on the whiteboard the number of bicycles your immediate family – your parents, you, and your brothers or sisters – own. Include e-bikes, but not motorcycles. If you don't know the exact number, just give an estimate.
- We will put the data into a file **n\_bikes.txt**, one number per line, and will post it in this assignment shortly after class.
- Starting with the provided starter file **n\_bikes.py**, write a program that reads the data from **n\_bikes.txt**, does some math, then displays the following on the screen:

```
Number of families:
Total number of bikes:
Average number of bikes per family:
Maximum number of bikes in a family:
Minimum number of bikes in a family:
```

• Extra credit (3 pts): once your program displays the correct results on the screen, edit the program to also write the above results to a file results.txt. (*Note:* <u>Don't</u> write the results to the input file n\_bikes.txt, because that would replace your input data.)

## Submitting

Test and run the program in the terminal on your computer before submitting.

Upload **n\_bikes.py** and a **readme.txt** to **NT Lab 10** in Canvas.

Ask a TA, Tutor, or Professor for help if you need it.