CS 100 Exam Two – Coding – Fall 2017

You are not allowed to use the Internet while coding the two problems below.
You can log into the cs-intro server to test your programs if you wish.
When you have finished coding your problems, submit your exam via Blackboard

Create a directory called **exam2** using **mkdir exam2** and move into that directory with **cd exam2**

Complete the two programs shown below:

1. Name this program **one.c** – This program reads words from standard input until it hits **end-of-file**. For each word, it prints only the first and last characters of the word, printing each word on a separate line. Note that if a word only has one letter in it, the program only prints that letter once. None of the words in the input will be longer than 50 characters. A sample execution of the program is shown below.

```
./a.out
Enter your text: Crimson Tide x y z Alabama
<control-d>
Cn
Te
x
y
z
Aa
```

2. Name this program **two.c** – This program reads a set of exam two coding scores from the file named **DATA**, detecting end-of-file to stop reading scores. All scores are integer values between 0 and 50 (51 possible values). Use an array to capture the number of times each score occurred. That is, the array captures how many students made a 0 and a 1 and a 2 and …. and a 48 and a 49 and a 50. After reading the data file, your program then (repeatedly) prompts the user for a score. Your program prints the number of exam scores that were less than the score entered. This process continues until the user enters a score of **-1**.

   For the sample **DATA** file shown below, an execution of the program is shown below.

10 25 50 50 5 0 0 45 45 15 25 50 2 50 30 40

```
./a.out
Enter a score to check on the exam: 45
10 scored lower than 45
Enter a score to check on the exam: 25
6 scored lower than 45
Enter a score to check on the exam: -1
```

Submit your exam

- First, on your local machine, compress your **exam2** directory into a single (compressed) file.
- Second, once you have a compressed file named **exam2.zip**, submit that file to Blackboard.