CSCI 161 Exam #2 Online Problem

This portion of the exam is open book and notes (your own only, of course). You may not consult anyone other than the instructor during this portion of the exam. You MAY use any code that you have previously developed in order to complete this question.

Description: Develop the *Exam2.java* program that reads the lines from a known text file that is formatted according to the *Input Specification* below. Each line of the text file contains daily pool chlorine level readings (in parts-per-million or ppm) with several readings recorded on a given date. The job of your program is to output the low, high and average chlorine readings for each date as shown in the *Output Specification* below.

Submit your *Exam2.java* program via AutoLab via the **Exam2** exam.

Input Specification: Your program should read from the *chlorine.txt* file in the current working directory. Each line of the file contains a date string, then a day-of-the-week string and lastly, a variable number of double chlorine readings for that date as in the following lines (feel free to cut and paste these lines for your file):

```
01/05/2019 Sunday 1.5 1.4 1.3 3.5 3.3 3.2 2.4 2.0
01/06/2019 Monday 1.6 1.3 1.2 0.9 3.2 3.1 3.0 2.2 1.8
01/07/2019 Tuesday 2.1 2.0 1.8 3.6 3.4 3.2 3.1 2.8
01/08/2019 Wednesday 2.0 1.8 3.4 3.3 3.1 3.0 2.8
01/09/2019 Thursday 0.7 0.6 0.5 3.9 3.6 3.4 3.3
01/10/2019 Friday 1.9 1.8 1.7 3.2 3.1 3.0 2.9 2.7
01/11/2019 Saturday 2.5 2.3 2.0 3.7 3.5 3.3 3.0 2.9
01/16/2019 Sunday 2.5 2.3 2.0 3.7 3.5 3.3 3.0 2.9
```

Output Specification: Your program should output each date along with that date's lowest, highest and average chlorine readings *exactly* according the following format (note the alignment of the day-of-the-week as well as the the precision of each average is one decimal place).

```
   Sunday 01/05/2019: low of 1.3, high of 3.5, average of 2.3 ppm
   Monday 01/06/2019: low of 0.9, high of 3.2, average of 2.0 ppm
  Tuesday 01/07/2019: low of 1.8, high of 3.6, average of 2.8 ppm
Wednesday 01/08/2019: low of 1.8, high of 3.4, average of 2.8 ppm
 Thursday 01/09/2017: low of 0.5, high of 3.9, average of 2.3 ppm
   Friday 01/10/2019: low of 1.7, high of 3.2, average of 2.5 ppm
 Saturday 01/11/2019: low of 2.0, high of 3.7, average of 2.9 ppm
   Sunday 01/12/2019: low of 2.0, high of 3.7, average of 2.9 ppm
```

I strongly suggest building in small increments so that you always have something that compiles. A program that is nearly complete and cleanly compiles will receive more points than a complete program that does not compile! Remember that you may submit early versions of the program as many times as you like!!