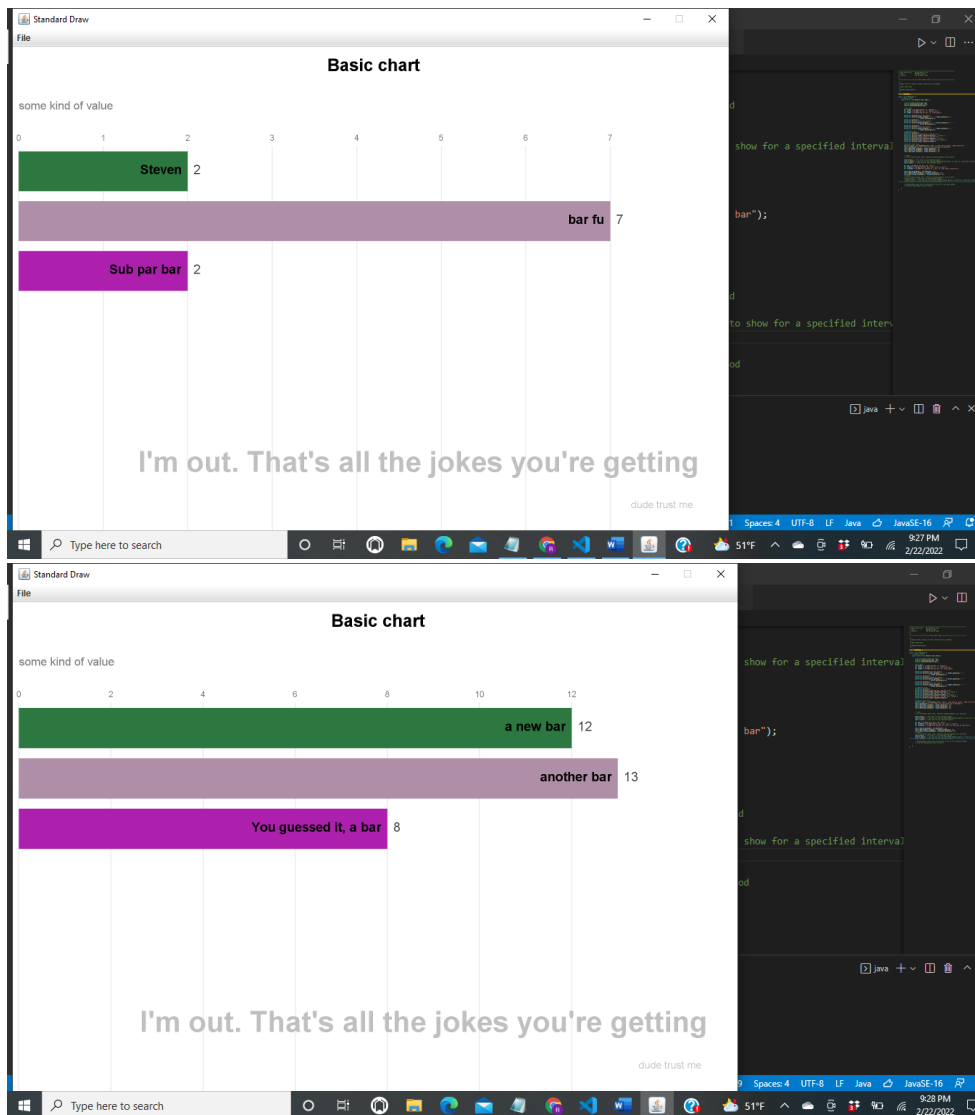


CSE 8B Homework 7:

Bar Chart Racer

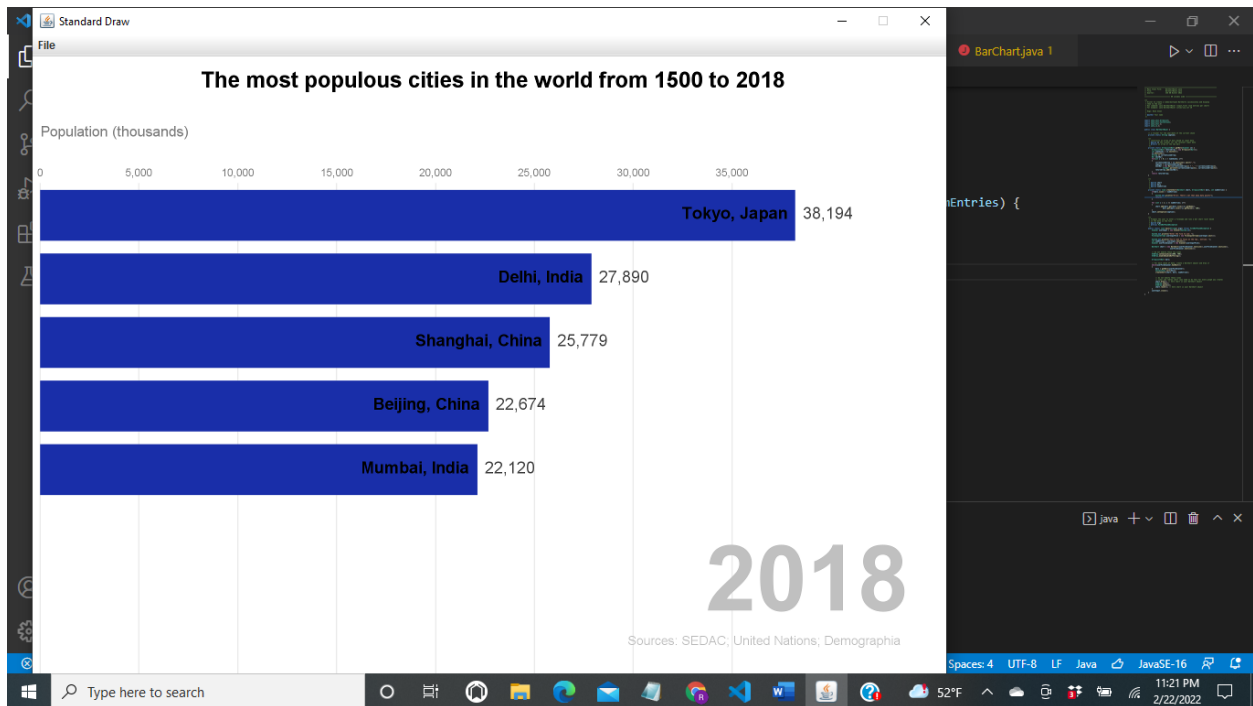
Parts 2, 3&4 Writeup Template

Attach the screenshots of your output from Part 2 below:



Attach the screenshots of your output from Part 3 below:

```
PROBLEMS 3 OUTPUT TERMINAL DEBUG CONSOLE
5
PS C:\Users\Rocky Hankin\Desktop\CSE_8B\Programs\PA7 Starter Files> java BarChartRacer.java
Enter the file to use:
cities.txt
You'd like to focus on the top _ entries:
5
[]
```



Answer the following questions (Part 4):

1. The Bar object implements the Comparable interface. Which method was required to be implemented as part of the Comparable interface?

`compareTo()`.

2. Which part of the code relies on the fact that the Bar object implements the Comparable object? Give the line or lines of code that uses this fact, as well as the method and class where this code appears.

The `Collections.sort` method. It's used in the main method of `BarChartRacer` to list the bars in ascending order.

```
Collections.sort(bars);
```

3. Draw the complete memory model for the following code, which you can assume is the only code in the main method of a new MMTester class:

```
Bar[] bars = new Bar[2];  
String location = "North California";  
bars[0] = new Bar("San Jose", 22674, location);  
bars[1] = new Bar("San Francisco", 27850, location);
```

You should include all the stack frames that are created when this code is run, as well as all objects that are created in the heap. When a stack frame is removed, just cross it out in your diagram.

