Java 1 Session 5 Assignment

In this assignment we will complete the virtual lottery started in Assignment 4. Here are some more details on the *LotteryDrawing* class:

- public void *run_simulation()* will
  - obtain an int[] from *pick_numbers()* (the winning lottery numbers)
  - obtain a second int[] from *pick_numbers()* or from the command line (the lottery ticket buyer numbers)
  - compare the two int[] arrays counting matches from 0 (no matches) to the number of balls (-b parameter) which would mean they all matched
  - keep track of the matches in a private instance int[] called **results** and provide a getter method for it
  - run two drawings a week (so 104 per year) for the number of years requested (-y parameter)

- private int[] *pick_numbers()* will
  - obtain and initialize a *java.util.Random* generator variable
  - fill a local int[] with random numbers from 1 to the number of balls (-b parameter)
  - verify unique numbers in the int[] (no duplicates)

- private void *init()* will
  - initialize the **results** array to zeros
  - do any other initial calculations to set instance variables as needed

- private void *validate()* will
  - do basic sanity checking on the three parameters passed into the constructor

Finally, in the *Lotto* class;

- public void *print_results()* will
  - using the **results** array from *LotteryDrawing* instance after *run_simulation()*, prints a report of results. Each row should have the match count (0, 1, 2, ...) fllowed by the results for that match count, and percentage of the total for that match count
  - (stretch goal) keep track of the simulation time and print that too