

AP Review Project

Goal: The goal of this project is to refresh on previous material and see where you are on the curriculum spectrum. This is a more open-ended prompt in that when you're working on it, feel free to split off and learn other topics or review earlier topics more.

1. Classes & Methods

- a. Make your own personal [Math](#) class.
- b. This class should include the following methods
 - i. Abs
 - ii. Max
 - iii. Min
 - iv. Pow
 - v. Sqrt
 - vi. Avg
 - vii. Random
- c. If you want to add any other methods, feel free to make more
 - i. Helper functions are welcome as well

2. Loops & Arrays

- a. In your main file, create an array of 1000 random numbers.
 - i. On each of these numbers, complete the Pow and Sqrt function
 - ii. Store those values in two separate arrays
 - iii. Then compute the average, min, and max of all of the numbers.
- b. If you're feeling ambitious, try doing this on a 100 by 100 2D array.

3. Inheritance

- a. Create a inherited class that inherits math
- b. Recreate each function but add toString to each of the functions more than just returning values.

4. ArrayLists

- a. Do this entire problem with ArrayLists instead.