Python Lesson July 6th Overview:

0.) Quiz on Random library, ascii table, and string concatenation (15 – 20 min)

1.) Review GeneratePasswords class (2-3 min)

2.) Add the following to the GeneratePasswords class: (30-45 min)

A.) GenerateXPasswords(…) # where X is a numeric amount

B.) RatePasswordsAndSelectBest(…)

C.) Refactor Code to account for edge cases

D.) Refactor Code to allow for user input on class constructor values

3.) Solve questions: (1 hour)

A.) MaxAsciiString.

Given an array of strings, find the string that has the highest ascii value:

Example:

```
Input: array[]= { a, z, b, f}
Output: z
The element z has the ascii value 122. The largest in the set

Input: array[] = { aaa, !!!!!, ~~, 1234}
Output: ~~
The element ~~ has the ascii value 252.  The largest in the set.
```

B.) Find ALL the peaks. Given an array of integers. Find all the peak elements in it. An array element is a peak if it is NOT smaller than its neighbors. For corner elements, we need to consider only one neighbor.

Example:

```
Input: array[]= {5, 10, 20, 15}
Output: 20
The element 20 has neighbors 10 and 15,
both of them are less than 20.

Input: array[] = {10, 20, 15, 2, 23, 90, 67}
Output: 20 , 90
The element 20 has neighbors 10 and 15,
both of them are less than 20, similarly 90 has neighbors 23 and 67.
```

C.) Extension of problem B. Find the longest peak.

4.) Unit Testing or Sorting (rest of the class)