# Lesson_8_Homework

June 5, 2018

## 1 Open the file we generated in class (Random2.csv) using python. Find the following:

### 1.1 The maximum value and the index of that value (argmax) for the first column.

### 1.2 Create a list of the sorted values and find the median value of the second column.

### 1.3 Create two separate lists for the positive and negative values (exclude 0) and find the mean of each for the third column.

### 1.4 Create a list of the odd values and the sum of the odd values for the fourth column.

## 2 Create a function has22 that takes a list as a parameter. This function should return True if the list has two sequential 2s and False otherwise. Run the following to test your function, you should get True, False, False, True, False:

```
In [ ]: print(has22([1,2,2,3,4,5]))
        print(has22([]))
        print(has22([1,2,1,2,4,5]))
        print(has22([2,2,2]))
        print(has22([2]))
```

## 3 Challenge Question: Create a function repeat2 that takes a list as a parameter. This function should return the maximum number of 2s repeated in sequence. Run the following to test your function, you should get 2, 0, 1, 3, 1, 3, 7:

```
In [ ]: print(repeat2([1,2,2,3,4,5]))
        print(repeat2([]))
        print(repeat2([1,2,1,2,4,5]))
        print(repeat2([2,2,2]))
```

```
print(repeat2([2]))
print(repeat2([2,1,2,2,1,2,2,2,1,1,1]))
print(repeat2([1, 1, 2, 1, 1, 1, 1, 1, 1, 1, 2, 1,
1, 1, 2, 2, 2, 2, 2, 1, 2, 1, 1, 2,
2, 2, 2, 2, 2, 2, 1, 1, 2, 1, 2, 1,
2, 1, 2, 2, 1, 1, 2, 1, 1, 1, 1, 1,
2, 1, 2, 1, 1, 1, 1, 2, 2, 2, 1, 2,
1, 2, 2, 2, 2, 1, 1, 2, 2, 1, 1, 1,
1, 1, 1, 2, 1, 2, 2, 1, 1, 1, 1, 1,
2, 1, 2, 1, 2, 1, 2, 1, 2, 2, 2, 2,
1, 2, 1, 2]))
```