Week 3 – In Class Participation

Setup

- Download dieclass.py with the MSDie class definition.
- Download diecollection.py with the SetOfDie class definition.
- Verify that the first line of the diecollection.py contains the line to import MSDie

```
from dieclass import MSDie
```

`SetOfDie` Class

Create the class `SetOfDie` that will store a list of `MSDie` objects.

1) The class should have the following attribute
   `dice:` list storing `MSDie` objects

Given the number of sides and the number of die, the constructor should initialize `dice` as a list which contains the given number of MSDie objects where all the dice have the given number of sides

The class should have the following methods:

2) `__str__()`: returns a string that has the string representation of each MSdie object on a new line.
3) `add()` – add a die with the same number of sides as the other dice in this collection
4) `rollsum()` – roll each die in the collection and return the sum of all the rolled values of the dice (2 pts)
5) `rollmaxmin()`: rolls all the dice and returns the max and min rolled values over all dice (2pts)
6) `__gt__(other)`: returns true if this set of die's max rolled value is bigger than the other set's max rolled value, and false otherwise.
   a) Update so that this set of dice is greater than other if it has dice with more sides than the other set (2 pts)
7) Testing (2 pts)
   Do a through testing of the __gt__ method.
   - Include expected results
   - Call the method using the "magical way" i.e. not explicitly
   - Make sure to include a test case for each output and to try boundary cases

8) Add comments at the headers of `rollsum` and `rollmaxmin` using: (2pts)

```
#purpose:
#input:
#output
#assumption
```