CSE 102 Quiz 3

Score 18 / 50

Data Structures, Sets, and Maps

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We created two data structures to store information about dates (month and days). One of these was a Map and one was a Set. We then used these to pass to methods to add the date information to the data structure and return information about the data. These are described as follows:

1. isDuplicate – returns true if the date has already been added. If the date is not found in the data already, adds it and returns false
2. countMostSoFar – adds the date to the data structure. Returns the number of times the date this date has been added so far

A main method and output using these data structures and methods is shown below.

```
public static void main(String[] args) {
   String[] myMonths = {"May", "June", "May", "July", "May", "May", "May"};
   int[] myDays =      {20,    20,     20,    20,     19,    19,    19};

   for(int i = 0; i < myMonths.length; i++) {
      System.out.println("Adding " + myMonths[i] + "-" + myDays[i]);
      System.out.println(isDuplicate(myThing1, myMonths[i], myDays[i]));
      System.out.println(countSoFar(myThing2, myMonths[i], myDays[i]));
   }
}
```

```
Adding May-20
false
1
Adding June-20
false
1
Adding May-20
true
2
Adding July-20
false
1
Adding May-19
false
1
Adding May-19
true
2
Adding May-19
true
3
```

(10 points) Determine which thing is a Map and which is a Set (circle one)

myThing1 Map (Set)

myThing2 (Map) Set

10

(20 points) Write an implementation for the `isDuplicate()` method

```
public static boolean isDuplicate( thing, String[] month, int[] day){

if(          )

}
```

(20 points) Write an implementation for the `countMostSoFar()` method

```
public static int countMostSoFar( thing , String[] month, int[] day){

}
```