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**StatsLibrary & SetOperations**

**What do these programs do?**

The StatsLibrary program contains many different types of formulas learned throughout my semester in my Probability and Statistic class. This program is ever evolving as we learn new formulas throughout the semester. Since topics build upon each other, many new formulas will integrate earlier methods to compute results rather quickly. Some of the formulas included are getting the median, mean, and mode. Other complicated ones like hypergeometric distribution and negative binomial distribution are also included

The SetOperations program contains certain operations that we may perform on multiple sets containing elements. Using ArrayLists, we can figure out the union and intersection of two sets, as well as the complement of a set and its subset.

Across these two programs, aspects like long and BigInteger variable types are used to accommodate large numbers. This allows for the program to be very versatile and can be used for handling large data sets.

Below are the results for these programs.

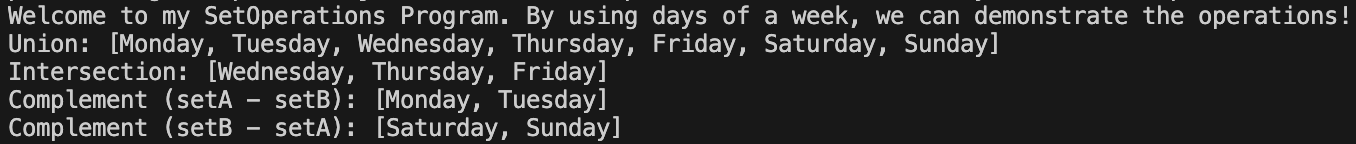
**Code Output**

**StatsLibrary:**

**A screenshot of a computer

AI-generated content may be incorrect.**

**SetOperations:**

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