**Solution Approach**

Features used in the application:

1. Core Java (JDK 1.7)
2. Spring core 3.2.0
3. Spring Test 3.2.0
4. Junit 4.11

This application is written using the core java concepts such as collections, interfaces, ENUMS, aggregations. All the beans are initialised using the spring IOC container and no explicit objects are created within the application including the test scripts.

The approach followed to develop the application is of production quality. All the results are currently being held in the memory and no database or I/O is used. However, the code developed in modular so that if in future, a database needs to be incorporated then in can be easily done without much changes in the code.

Below is the pictorial presentation of the code flow.