SUMMARY

The purpose of the project is to test the class ***SportEventManager*** using the ***JUNIT*** library. The test cases are written method wise for the methods in the class. Each method has different use and has various return types. The JUNIT test case should be written to test the return type of the method. For each return type in a method, a test case is written to test under a given condition whether the function returns the right value. Similarly, for all nine different methods which are to be tested are tested for all return types present in it.

A JUNIT test case has three steps to test a test case. The first step is to invoke the class under test. By invoking the class an object is created and therefore an instance of the class is created. The second step is to identify and initialize the input for the variables in the method under test. By initializing the method can perform the respective operation with the input value. The third step is to check whether the whether the expected output of the method matches with the actual output of the method. By checking for the result, the test case can either pass or fail. If the test case fails, then there occurs to be an error in the method under test. If the test case passes the passes, then the method under test is clear of error and can be concluded the method functions properly.

The functions which are used to check the actual output with the expected output in the case of testing the class ***SportEventManager*** is mostly ***assertEquals(expected,actual)***. The code coverage is the measure of how much of the code in the class under test is covered using the test case. In the case of the ***SportEventManager***, the code coverage of **97.9** was able to achieve. To test all the methods at a same time, a JUNIT test suite is created. The code is runnable using the JUNIT test suite.