ASSIGNMENT 1

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# CSCS 351 Section: A

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**What is unittest?**

A unit test is a way of testing a unit - the smallest piece of code that can be logically isolated in a system. In most programming languages, that is a function, a subroutine, a method or property. The isolated part of the definition is important. In his book "Working Effectively with Legacy Code", author Michael Feathers states that such tests are not unit tests when they rely on external systems: “If it talks to the database, it talks across the network, it touches the file system, it requires system configuration, or it can't be run at the same time as any other test."

**Test fixture:**

A test fixture is an environment used to consistently test some item, device, or piece of software. Test fixtures can be found when testing electronics, software and physical devices.

**test case:**

A test case is a document, which has a set of test data, preconditions, expected results and postconditions, developed for a particular test scenario in order to verify compliance against a specific requirement.

**test suite:**

In software development, a test suite, less commonly known as a validation suite, is a collection of test cases that are intended to be used to test a software program to show that it has some specified set of behaviours.

**test runner:**

A test runner is the library or tool that picks up an assembly (or a source code directory) that contains unit tests, and a bunch of settings, and then executes them and writes the test results to the console or log files. there are many runners for different languages. See Nunit and MSTest for C#, or Junit for Java.

* **For This assignment I will be performing testing using Junit testing framework and wrote 6 test cases.**

**Methods:**

Following are the methods that I had used in this assignment:

|  |  |
| --- | --- |
| **Method** | **Checks that** |
| add(a, b) | a+ b |
| sub(a, b) | a – b |
| Div(a,b) | a/b |
| FailAdd(x) | Add is false |
| FailSub(x) | Sub is false |
| FailDiv(x) | Div is false |

**Output:**

All the 6 test cases are giving output.