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**22-11043**

**CSCS351**

**SECTION A**

**ASSIGNMENT 1**

**Testing different programs.**

A total of 7 test cases were created and tested in the span of 2 programs. One program was simple arithmetic test functionality, and the second program was to test different string methods. The language that was used was **Python** and **unittest** framework was used to automate these tests.

**Program 1:**

4 different test cases were tested which were to see if they pass the automated test or not. The scripts for all the test cases have been uploaded on GitHub as well.

* First test case was to check if the two numbers are adding and giving the correct answer.
* Second test case was to check division of two numbers and to raise an error if the number is being divided by 0
* Third and fourth test cases were similar to the first test case to see if two numbers are giving out correct answers.

The first screenshot displays all test cases passing the automated test.

A picture containing graphical user interface

Description automatically generated

This screenshot displays an error against division test case in which the test was tested against dividing a number with 0. Here we can see a **ValueError** being raised which is telling us that the number could not be divided by zero!

Text

Description automatically generated

**Program 2:**

In this program 3 different test cases were made to check different string methods which were

* .isupper()
* .split()
* .upper()
* The first test case was used to check whether the input string given is uppercase or not
* Second test case was used to check two things. One was if the input given is a string and to check if they are already not separated by a “,”.
* Third test case was used to check if the string entered was converted to an uppercase or not.

As we can see in this screenshot, the tests that were automated to test these test cases were passed and we were given an ok from the automated test.

Text

Description automatically generated with medium confidence

In this screenshot, an attribute error was raised as the input given was not a string but instead was an integer that is what we can see in the error, due to which, the automated test was failed.

Graphical user interface, text

Description automatically generated