# **Test report of Client-Server Architecture**

The Assignment has a server-client architecture with asyncio. The whole code is basically divided into 8 python files.

The testing was done by the unit test module. The operation py file has the procedure of commands. The testing was done by creating the user's desired space for his commands to be executed.

The first command is used for creating a folder and that command was tested and the tests were approved. Coming to the second command is about writing a file in the same directory or in a folder, the test was approved by function writing file. Thereafter, the third command is about reading a file, this function was also tested and approved. Next, the fourth command is a list of directories, this command has also been tested and approved. Now for the fifth command was changing path to the given folder the test was approved using this command.

In the test.py file, the Unit-test module had been imported. The class had been created for testing the operations in the operations.py file.

## Why Unit-test?

Unit-test was used because it was done in a separate file by importing the target file, which needs to be tested. Unit-test provides the features to test server and client-side projects where Doctest don't.

### What Unit-test tests?

This Unit-test shall test the function of the Operation class in the operation.py file. The class is supposed to have 5 functions and each of these functions was tested and approved.

#### **How Unit-test is testing?**

Every function was called out by giving the parameters and result value by storing in the variable. By using asserts comparison between the returned value and the excepted value is carried out.

#### **How many tests were done?**

In the Test Operation class in test.py file, the four test case were implemented and I believe the four cases aren't enough and can be tested with any number of variations of inputs.

#### Areas, which were not tested:

The areas, which are not tested are log in and Register functions in Server as well as Client code. Because while trying to test the server function, server was being turned on and the test was not done. As you can understand by seeing the code in the register and login files of both and client and server.