# Test Report of Client-Server Architecture

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

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

The first command was creating a folder and that command was tested and the test was passed. So coming for the second command is writing a file in the same directory or in a folder, the test was passed by function writing file. Next, the third command is reading a file, this function was also tested as passed. Next, the fourth command is a list of directories, this command is also tested as passed. So for the fifth command was changing path to the given folder the test was passed by this command.

In the test.py file, the Unittest module was imported. The class was created for testing the operations in the operations.py file.

# Why Unittest?

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

#### What Unittest tests?

This Unittest will test the function of the Operation class in the operation.py file. The class has 5 functions and each of these functions was tested and got passed.

### How Unittest is testing?

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

# How many tests was done?

In the TestOperation class in test.py file, the four test case was implemented and I think the four cases won't be 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 getting started 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.