UNIT TESTING REPORT

- **Makefile for testing:**

```
projtest: testdriver.o name.o testsuite.o
        gcc -o ../bin/projtest.exe ../obj/testdriver.o ../obj/testsuite.o ../obj/name.o -lcunit

testdriver.o: ../src/testdriver.c
        gcc -o ../obj/testdriver.o -c ../src/testdriver.c -lcunit

testsuite.o: ../src/testsuite.c
        gcc -o ../obj/testsuite.o -c ../src/testsuite.c -lcunit

name.o: ../src/namepass.c
        gcc -o ../obj/name.o -c ../src/namepass.c

t1.o: ../src/test_name_pass.c
        gcc -o ../obj/t1.o -c ../src/test_name_pass.c -Wall
```

- **CUnit Report:**

```
        CUnit - A unit testing framework for C - Version 2.1-3
        http://cunit.sourceforge.net/


Suite: Name valid or invalid
  Test: test of validName() in normal cases ...passed
  Test: test of invalidName() in error cases ...passed
Suite: Name valid or invalid
  Test: test of validPass() in normal cases ...passed
  Test: test of invalidPass() in error cases ...passed

Run Summary:      Type  Total    Ran Passed Failed Inactive
                suites      2      2    n/a      0        0
                 tests      4      4      4      0        0
               asserts      8      8      8      0      n/a

Elapsed time =    0.000 seconds
```

INTEGRATION TESTING REPORT

- **Makefile for testing:**

```
server: smain.o
        gcc ../obj/smain.o  -o ../bin/server

client: cmain.o
        gcc ../obj/cmain.o ../header/cheader.h -o ../bin/client

smain.o: ../src/smain.c
        gcc ../src/smain.c -c -Wall -o ../obj/smain.o

cmain.o: ../src/cmain.c
        gcc  ../src/cmain.c -c -Wall  -o ../obj/cmain.o
```

- **On basis of connectivity :**

```
USER@DESKTOP-DI40DVI ~/InstantChatt
$ ./client.exe 8080
Please enter your name: Lee
Please enter your password: lee55
ERROR: connect
```

- **On the basis of arguments :**
  - **Invalid:**

```
USER@DESKTOP-DI40DVI ~/Instant
$ ./server.exe
Usage: ./server <port>
```

  - **Valid:**

```
USER@DESKTOP-DI40DVI ~/Instant
$ ./client.exe
Usage: ./client <port>
```

- **On the basis of user input :**
  - **User Name :**

```
USER@DESKTOP-DI40DVI ~/InstantChatters/CUT/Code/bin
$ ./client.exe 8080
Please enter your name: L
Name must be less than 30 and more than 2 characters.
```

  - **User Password :**

```
USER@DESKTOP-DI40DVI ~/InstantChatters/CUT/Code/bin
$ ./client.exe 8080
Please enter your name: Licency
Please enter your password: v
Password must be less than 30 and more than 2 characters.
```