Subjec	t:
٦	C4002 - Analysis, Design and Construction of Software Systems
Profess	sor:

**L4.2** - Code Coverage and Coding Standard

Gerardo Padilla Zarate

Student:

Juan Francisco Corral Stenner

A00354823

For this assignment, I had to go back and modified some of my programs in order to get the most coverage possible. Lab3\_17.py and lab3\_19.py asked for the unit testing of a built-in function, math.factorial() and filecmp.com(), respectively, I had to slightly modified them in order to applied the proper unit test to them.

1) For all previous exercises, measure the coverage for your testing. Provide Screenshots for the measurements. Try to achieve at least 90% of Statement Coverage. Get PEP8 checking tool and modify your programs to achieve 8 issues in PEP8. Provide Screenshots as evidence.

✓ ✓ Test Results	19 ms Testing started at 04:00 p. m	
✓ test_lab1_8	19 ms	C:\Users\jucorral\Documents\persona
✓ ✓ TestLab1_8	19 ms	Launching unittests with arguments
✓ test_mean	13 ms	
✓ test_mean_types	0 ms	
✓ test_mean_values	0 ms	
✓ test_median	0 ms	Ran 9 tests in 0.024s
✓ test_median_types	0 ms	
✓ test_median_values	0 ms	OK
✓ test_percentil	2 ms	
✓ test_quartil	0 ms	Process finished with exit code 0
test_std_deviation	4 ms	

Figure 1 - test\_lab1\_8.py

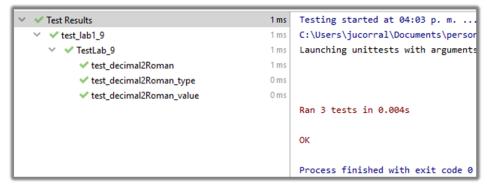


Figure 2 - test\_lab1\_9.py

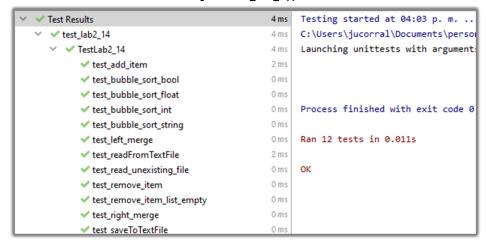


Figure 3 - test\_lab2\_14.py

```
Testing started at 04:04 p. m. ..

✓ Test Results

                                                   12 ms

√ test_lab2_15

                                                   12 ms
                                                           C:\Users\jucorral\Documents\persor
                                                          Launching unittests with arguments

✓ ✓ Test

                                                   12 ms

✓ test_create_record

                                                    1 ms

✓ test_load_records_from_file

                                                    1 ms
          test_load_records_from_not_found_file
                                                    0 ms
                                                    3 ms
                                                          Ran 6 tests in 0.019s
          test_save_to_file_diff_info
          test_save_to_file_same_info
                                                    7 ms
          test_search_record_mult_types
                                                    0 ms
                                                          Process finished with exit code 0
```

Figure 4 - test\_lab2\_15.py

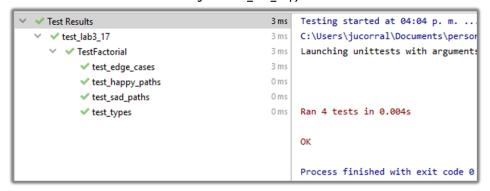


Figure 5 - test\_lab3\_17.py



Figure 6 - test\_lab3\_19.py

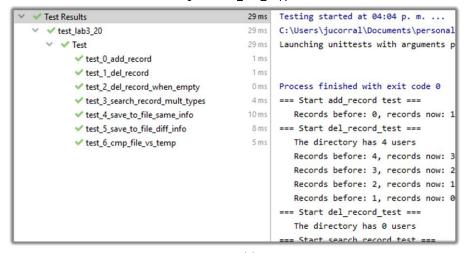


Figure 7 - test\_lab3\_20.py

```
:\Users\jucorral\Documents\personal\Master\TC4002 analisisDiseñoYConstruc
onDelSoftware\lab4>coverage run --source=. -m unittest discover
 Records before: 0, records now: 1
== Start del_record_test ===
  The directory has 4 users
  Records before: 4, records now: 3
  Records before: 3, records now: 2
 Records before: 2, records now: 1
Records before: 1, records now: 0
=== Start del_record_test ===
  The directory has 0 users
  == Start search_record_test ===
Searching: 32 - type: <class 'str'> in age or email
    Juan Stenner matched
  Searching: 25 - type: <class 'int'> in age or email
    No such user
  Searching: 32 - type: <class 'int'> in age or email
    No such user
  Searching: True - type: <class 'bool'> in age or email
    No such user
  Searching: None - type: <class 'NoneType'> in age or email
    No such user
  Searching: esther.rivas@gmail.com - type: <class 'str'> in age or email
    Esther Rivas matched
  == Start save_to_file_same_info test ===
  Populating records
  Saving to test1.txt
  Saving to test2.txt
 Comparing test1.txt vs test2.txt == Start save_to_file_diff_info test ===
  Populating records
  Saving to test1.txt
Adding Ivette Rios to the records.
  Saving to test2.txt
  Comparing test1.txt vs test2.txt
  == Start cmp_file_vs_temp test ===
  Populating records
  Saving to test1.txt
  Comparing test1.txt vs records
  Adding Ivette Rios to the records.
  Comparing test1.txt vs records
Ran 44 tests in 0.129s
:\Users\jucorral\Documents\personal\Master\TC4002 analisisDiseñoYConstrucd
onDelSoftware\lab4>_
```

Figure 8 - coverage run

```
C:\Users\jucorral\Documents\personal\Master\TC4002_analis
 isDiseñoYConstruccionDelSoftware\lab4>coverage report
                           Stmts Miss Cover
 Name
lab1_8.py
lab1_9.py
lab2_14.py
                                                  100%
                               30
                                           0
                                                  100%
                                           0
                                                  100%
                                30
lab2_14.py
lab2_15.py
lab3_17.py
lab3_19.py
lab3_20.py
test_lab1_8.py
test_lab2_14.py
                                                  100%
                                           0
                                                  100%
                                                  100%
                                           0
                                           0
                                                  100%
                                49
                                           0
                                                  100%
                                                  100%
                                           0
                                           0
                                                  100%
test_lab2_15.py
test_lab3_17.py
test_lab3_19.py
test_lab3_20.py
                                                  100%
                                           0
                                22
                                           0
                                                  100%
                                17
                                                  100%
                                           0
                                                  100%
                                88
                                            0
 TOTAL
                              456
                                                  100%
 C:\Users\jucorral\Documents\personal\Master\TC4002_analis
isDiseñoYConstruccionDelSoftware\lab4>
```

Figure 9 - coverage report

C:\Users\jucorral\Documents\personal\Master\TC4002\_analis
isDiseñoYConstruccionDelSoftware\lab4>coverage html

Figure 10 - coverage html