

Test functions

Test.1. we check that how many records are there in a CSV file and how many records have been inserted into the table.

Test.2. we check how many columns and records are there in a CSV file and the related table to make sure all records have been inserted into the tables in MySQL.

```
import unittest
from maintest import *

✓ Run Test | ✓ Debug Test
class Test_function_youtube(unittest.TestCase):
    ✓ Run Test | ✓ Debug Test
    def test_import_rows_accuracy(self):
        tablename = 'Views_CA'
        actual_rows, isCorrect = check_import_accuracy(tablename, 58881)
        self.assertEqual(actual_rows, 58881)
        self.assertEqual(isCorrect, 'correct')

    Run Test | Debug Test
    def test_rows_columns_accuracy(self):
        tablename = 'Views_CA'
        isCorrect, actual_rows, actual_cols = check_row_columns_accuracy(tablename, 58881, 8)
        self.assertEqual(isCorrect, 'correct rows and columns')
        self.assertEqual(actual_rows, 58881)
        self.assertEqual(actual_cols, 8)
```

```
Run Test | Debug Test
def test_rows_columns_accuracy2(self):
    tablename = 'Views_CA'
    expected_rows = count_num_records(tablename)
    expected_cols = count_num_columns(tablename)
    isCorrect, actual_rows, actual_cols = check_row_columns_accuracy(tablename, expected_rows, expected_cols)
    self.assertEqual(isCorrect, 'correct rows and columns')
    self.assertEqual(actual_rows, expected_rows)
    self.assertEqual(actual_cols, expected_cols)

Run Test | Debug Test
def test_num_csv_rows(self):
    filename = 'CAviews.csv'
    results = count_csv_file_records(filename)
    self.assertEqual(results, 40882)

Run Test | Debug Test
def test_num_table_rows(self):
    tablename = 'Views_CA'
    results = count_num_records(tablename)
    self.assertEqual(results, 58881)

Run Test | Debug Test
def test_num_table_cols(self):
    tablename = 'Views_CA'
    results = count_num_columns(tablename)
    self.assertEqual(results, 8)

if __name__ == '__main__':
    unittest.main()
```

Therefore, we have 6 testcases that have been processed by Unittest in Python and the results is ok.

```
1  import unittest
2  from maintest import *
3
Run Test | Debug Test
4  class Test_function_youtube(unittest.TestCase):
Run Test | Debug Test
5      def test_import_rows_accuracy(self):
6          tablename = 'Views_CA'
7          actual_rows, isCorrect = check_import_accuracy(tablename,58881)
8          self.assertEqual(actual_rows, 58881)
9          self.assertEqual(isCorrect, 'correct')
10
Run Test | Debug Test
11     def test_rows_columns_accuracy(self):
12         tablename = 'Views_CA'
13         isCorrect, actual_rows, actual_cols = check_row_columns_accuracy(tablename,58881,8)
14         self.assertEqual(isCorrect, 'correct rows and columns')
15         self.assertEqual(actual_rows, 58881)
16         self.assertEqual(actual_cols, 8)

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
[Running] python -u "d:\ece656\ece656_dataset\youtube\insert_date\test.py"
.....
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Ran 6 tests in 0.193s

OK

[Done] exited with code=0 in 0.586 seconds
```