ACTIVIDAD SEMANA 4

ACTIVIDAD 4.2: Ejercicio de programación 1

MATERIA: PRUEBAS DE SOFTWARE Y ASEGURAMIENTO DE LA CALIDAD

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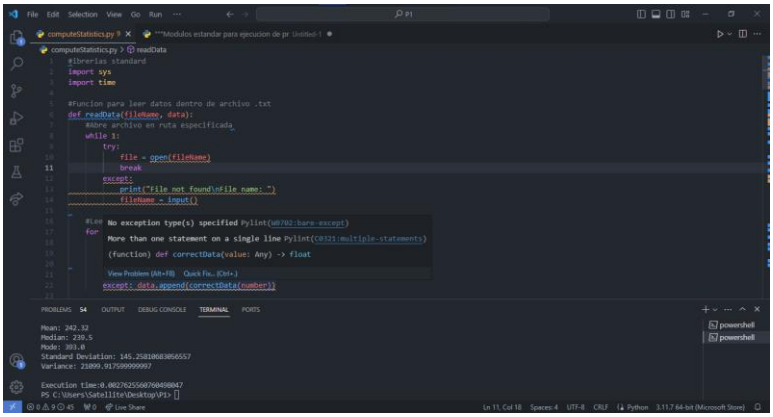
TUTOR: MTRA. YETNALEZI QUINTAS RUIZ

FECHA: 04/02/2024

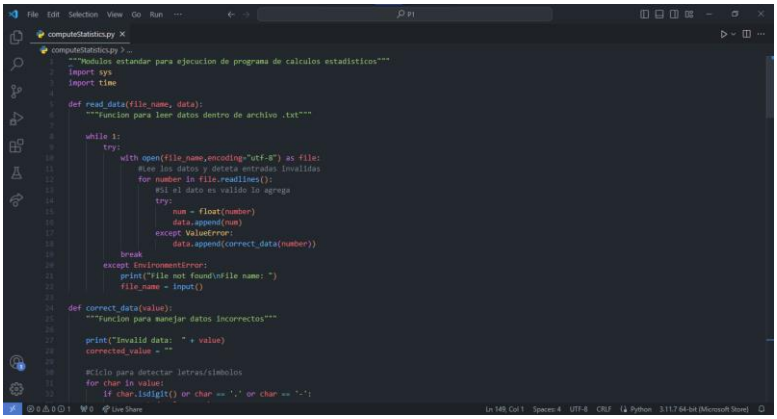
CDMX

compute_statistics.py

PYLINT PRE

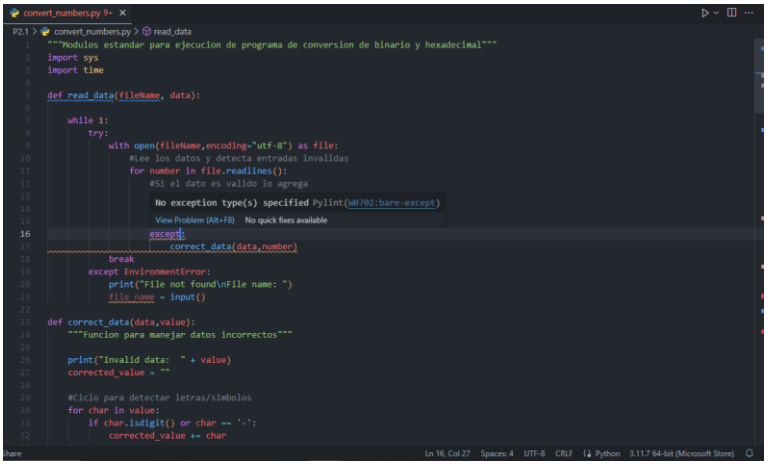


PYLINT POS

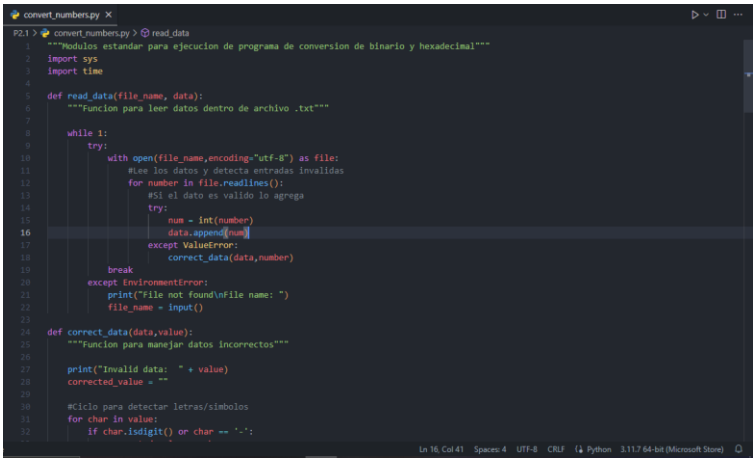


convert_numbers.py

PYLINT PRE



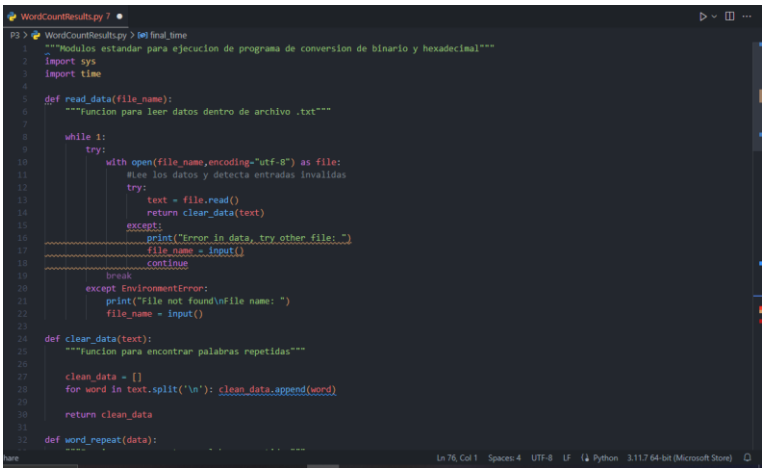
PYLINT POS



```python
"""Modulos estandar para ejecucion de programa de conversion de binario y hexadecimal"""
import sys
import time

def read_data(file_name, data):
    """Funcion para leer datos dentro de archivo .txt"""

    while 1:
        try:
            with open(file_name,encoding="utf-8") as file:
                #Lee los datos y detecta entradas invalidas
                for number in file.readlines():
                    #Si el dato es valido lo agrega
                    try:
                        num = int(number)
                        data.append(num)
                    except ValueError:
                        correct_data(data,number)
            break
        except EnvironmentError:
            print("File not found\nFile name: ")
            file_name = input()

def correct_data(data,value):
    """Funcion para manejar datos incorrectos"""

    print("Invalid data:  " + value)
    corrected_value = ""

    #Ciclo para detectar letras/simbolos
    for char in value:
        if char.isdigit() or char == '-':
```

word_count.py

PYLINT PRE

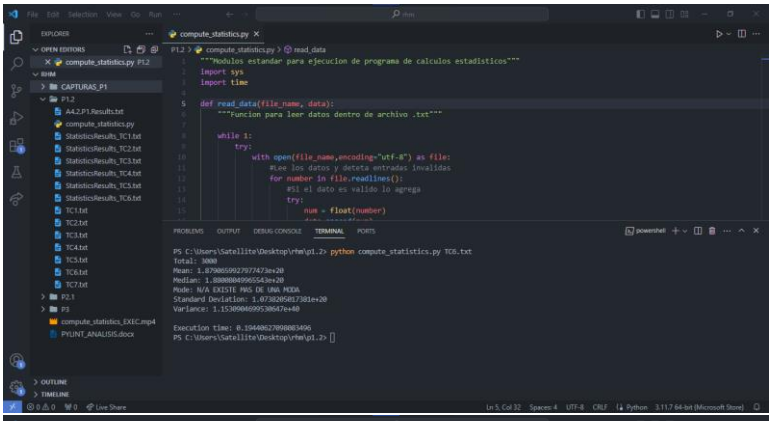


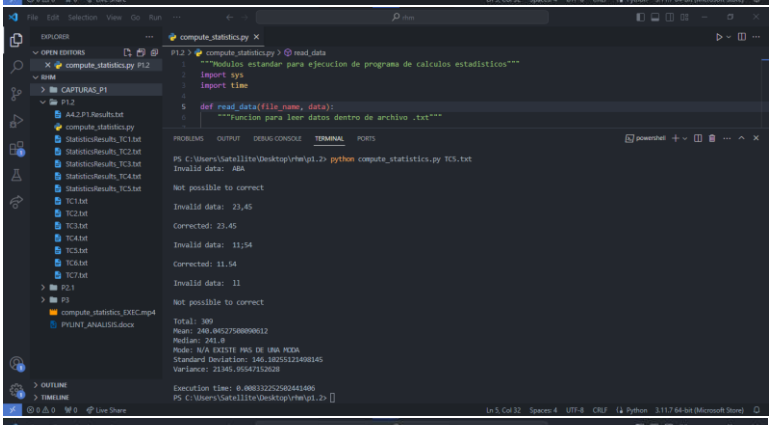
```python
"""Modulos estandar para ejecucion de programa de conversion de binario y hexadecimal"""
import sys
import time

def read_data(file_name):
    """Funcion para leer datos dentro de archivo .txt"""

    while 1:
        try:
            with open(file_name,encoding="utf-8") as file:
                #Lee los datos y detecta entradas invalidas
                try:
                    text = file.read()
                    return clear_data(text)
                except:
                    print("Error in data, try other file: ")
                    file_name = input()
                    continue
            break
        except EnvironmentError:
            print("File not found\nFile name: ")
            file_name = input()

def clear_data(text):
    """Funcion para encontrar palabras repetidas"""

    clean_data = []
    for word in text.split('\n'): clean_data.append(word)

    return clean_data

def word_repeat(data):
```

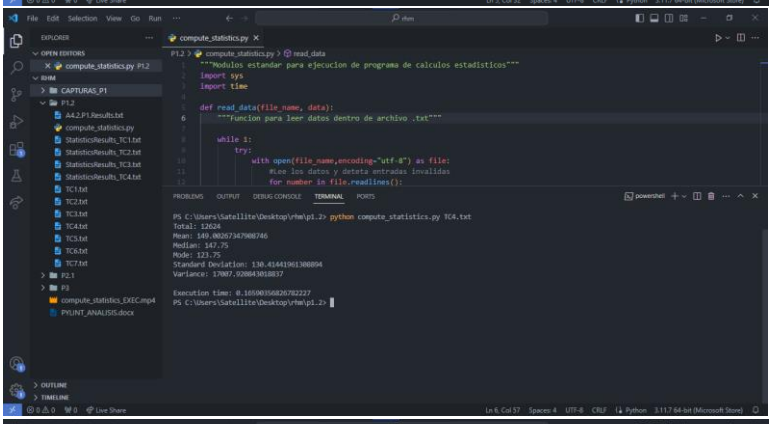
PYLINT POS

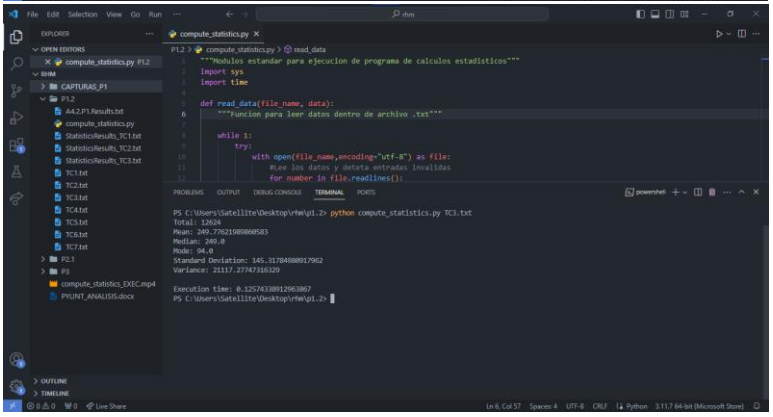
```python
"""Modulos estandar para ejecucion de programa de conversion de binario y hexadecimal"""
import sys
import time

def read_data(file_name):
    """Funcion para leer datos dentro de archivo .txt"""

    while 1:
        try:
            with open(file_name,encoding="utf-8") as file:
                #Lee los datos y detecta entradas invalidas
                try:
                    text = file.read()
                    return clear_data(text)
                except ValueError:
                    print("Error in data, try other file: ")
                    file_name = input()
                    continue
            break
        except EnvironmentError:
            print("File not found\nFile name: ")
            file_name = input()

def clear_data(text):
    """Funcion para encontrar palabras repetidas"""

    clean_data = []
    for word in text.split('\n'):
        clean_data.append(word)

    return clean_data
```

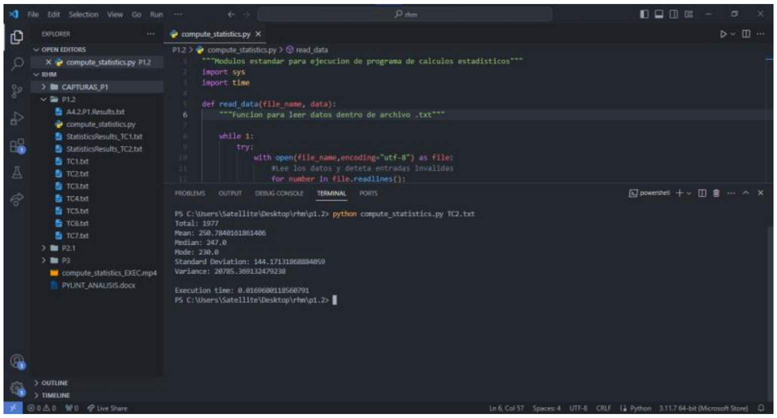
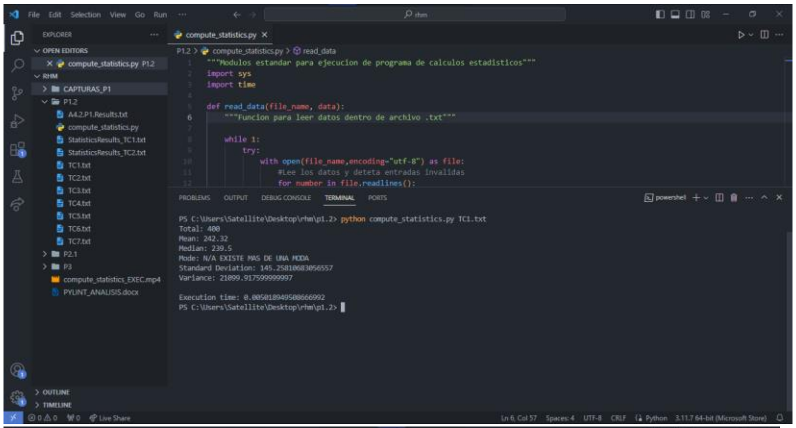
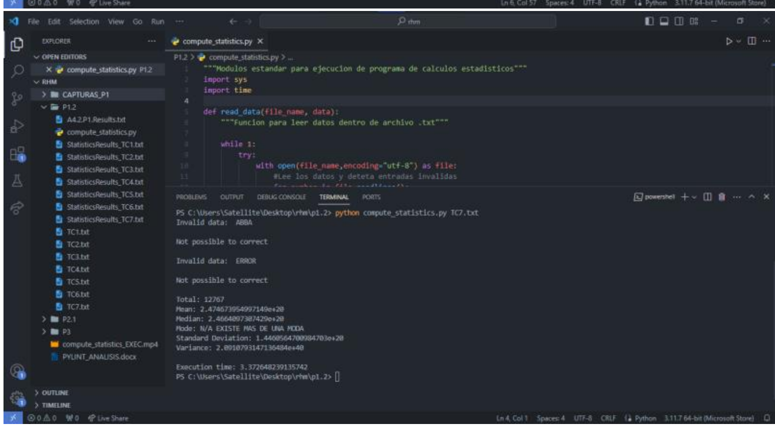
P1 Outputs


compute_statistics.py
"""Modulos estandar para ejecuclon de programa de calculos estadisticos"""
import sys
import time
def read_data(file_name, data):
"""Funcion para leer datos dentro de archivo .txt"""
while 1:
try:
with open(file_name,encoding="utf-8") as file:
#Lee los datos y deteta entradas invalidas
for number in file.readlines():
#Si el dato es valido lo agrega
try:
num = float(number)
PS C:\Users\Satellite\Desktop\rhm\p1.2> python compute_statistics.py TC6.txt
Total: 3000
Mean: 1.870065992797747 3e+20
Median: 1.8888084996554 3e+20
Mode: N/A EXISTE MAS DE UNA MODA
Standard Deviation: 1.0736205857381e+20
Variance: 1.153090469955306 47e+40
Execution time: 0.19440627890883496
PS C:\Users\Satellite\Desktop\rhm\p1.2>

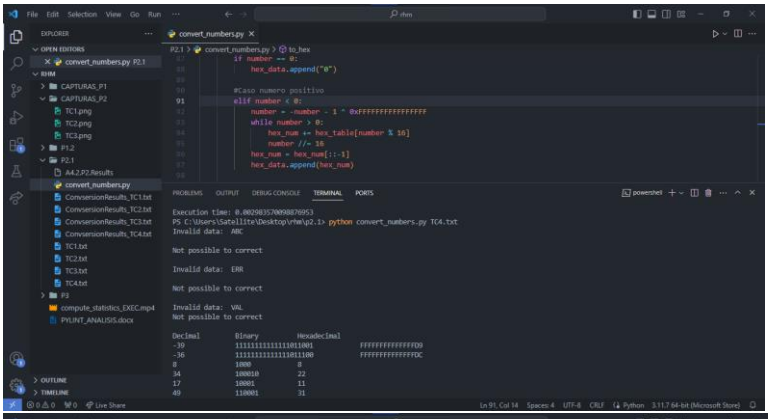

compute_statistics.py
"""Modulos estandar para ejecuclon de programa de calculos estadisticos"""
import sys
import time
def read_data(file_name, data):
"""Funcion para leer datos dentro de archivo .txt"""
PS C:\Users\Satellite\Desktop\rhm\p1.2> python compute_statistics.py TC5.txt
Invalid data: ABA
Not possible to correct
Invalid data: 23,45
Corrected: 23.45
Invalid data: 11;54
Corrected: 11.54
Invalid data: 11
Not possible to correct
Total: 309
Mean: 240.04527508090612
Median: 241.0
Mode: N/A EXISTE MAS DE UNA MODA
Standard Deviation: 146.18255121498145
Variance: 21345.955475152628
Execution time: 0.008332252502441406
PS C:\Users\Satellite\Desktop\rhm\p1.2>

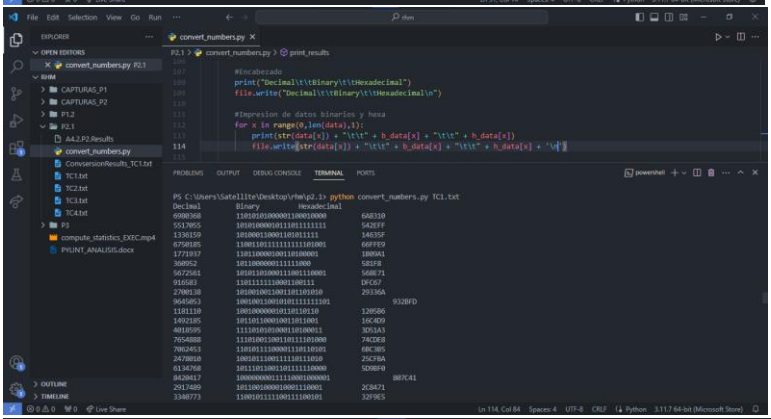

compute_statistics.py
"""Modulos estandar para ejecuclon de programa de calculos estadisticos"""
import sys
import time
def read_data(file_name, data):
"""Funcion para leer datos dentro de archivo .txt"""
while 1:
try:
with open(file_name,encoding="utf-8") as file:
#Lee los datos y deteta entradas invalidas
for number in file.readlines():
PS C:\Users\Satellite\Desktop\rhm\p1.2> python compute_statistics.py TC4.txt
Total: 12624
Mean: 149.00267347908746
Median: 147.75
Mode: 123.75
Standard Deviation: 130.41441961308894
Variance: 17007.928843018837
Execution time: 0.16500356826782227
PS C:\Users\Satellite\Desktop\rhm\p1.2>

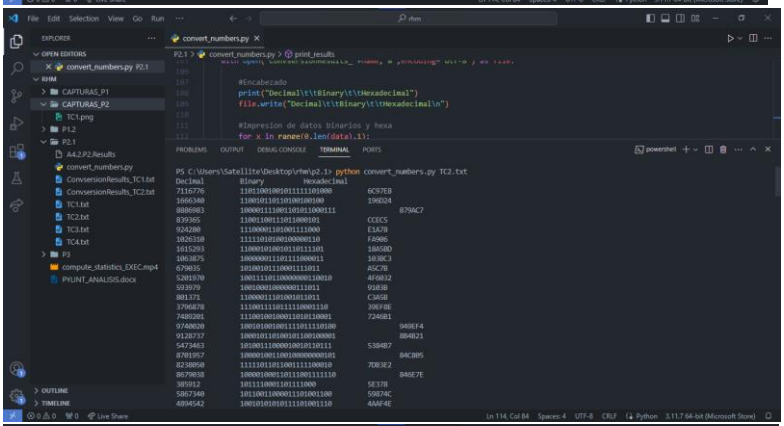

compute_statistics.py
"""Modulos estandar para ejecuclon de programa de calculos estadisticos"""
import sys
import time
def read_data(file_name, data):
"""Funcion para leer datos dentro de archivo .txt"""
while 1:
try:
with open(file_name,encoding="utf-8") as file:
#Lee los datos y deteta entradas invalidas
for number in file.readlines():
PS C:\Users\Satellite\Desktop\rhm\p1.2> python compute_statistics.py TC3.txt
Total: 12624
Mean: 249.77921980860583
Median: 249.0
Mode: 94.0
Standard Deviation: 145.31704088917962
Variance: 21117.277477316329
Execution time: 0.12574338912963867
PS C:\Users\Satellite\Desktop\rhm\p1.2>

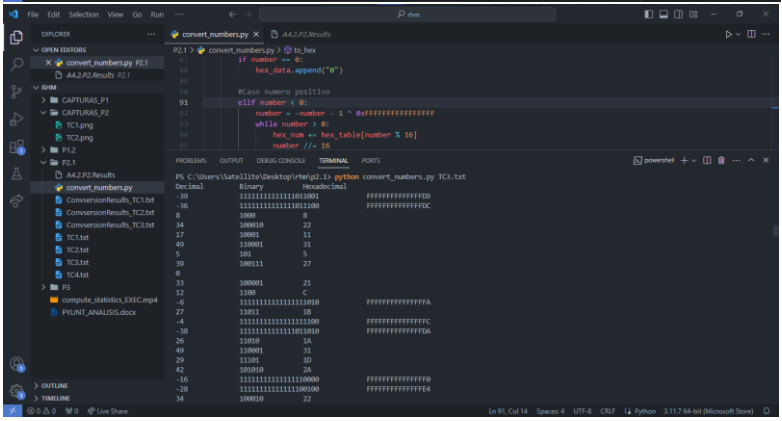

compute_statistics.py
"""Modulos estandar para ejecucion de programa de calculos estadisticos"""
import sys
import time
def read_data(file_name, data):
"""Funcion para leer datos dentro de archivo .txt"""
while 1:
try:
with open(file_name,encoding="utf-8") as file:
#Lee los datos y deteta entradas invalidas
for number in file.readlines():
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
PS C:\Users\Satellite\Desktop\rhm\p1.2> python compute_statistics.py TC2.txt
Total: 1977
Mean: 250.7840161861406
Median: 247.0
Mode: 230.0
Standard Deviation: 144.17131868884059
Variance: 20785.369132479238
Execution time: 0.0169680118560791
PS C:\Users\Satellite\Desktop\rhm\p1.2>

compute_statistics.py
"""Modulos estandar para ejecucion de programa de calculos estadisticos"""
import sys
import time
def read_data(file_name, data):
"""Funcion para leer datos dentro de archivo .txt"""
while 1:
try:
with open(file_name,encoding="utf-8") as file:
#Lee los datos y deteta entradas invalidas
for number in file.readlines():
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
PS C:\Users\Satellite\Desktop\rhm\p1.2> python compute_statistics.py TC1.txt
Total: 400
Mean: 242.32
Median: 239.5
Mode: N/A EXISTE MAS DE UNA MODA
Standard Deviation: 145.25810683056557
Variance: 21099.917599999997
Execution time: 0.005018949508666992
PS C:\Users\Satellite\Desktop\rhm\p1.2>

compute_statistics.py
"""Modulos estandar para ejecucion de programa de calculos estadisticos"""
import sys
import time
def read_data(file_name, data):
"""Funcion para leer datos dentro de archivo .txt"""
while 1:
try:
with open(file_name,encoding="utf-8") as file:
#Lee los datos y deteta entradas invalidas
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
PS C:\Users\Satellite\Desktop\rhm\p1.2> python compute_statistics.py TC7.txt
Invalid data: ABBA
Not possible to correct
Invalid data: ERROR
Not possible to correct
Total: 12767
Mean: 2.4746739549971490e+20
Median: 2.4664097387429e+20
Mode: N/A EXISTE MAS DE UNA MODA
Standard Deviation: 1.4460564700984703e+20
Variance: 2.0910793147136484e+40
Execution time: 3.372648239135742
PS C:\Users\Satellite\Desktop\rhm\p1.2>

P2 Outputs

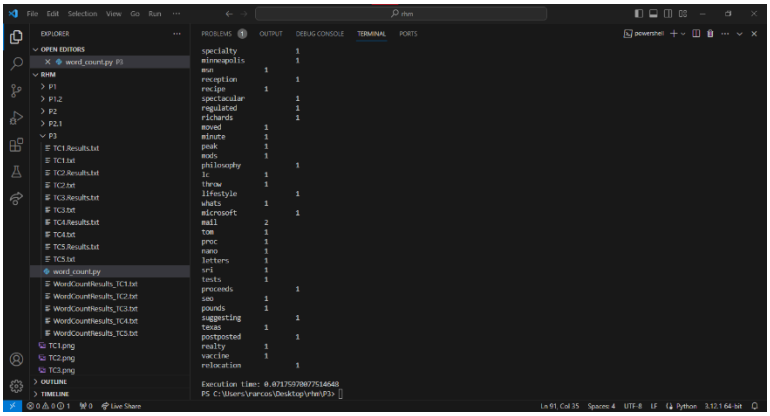


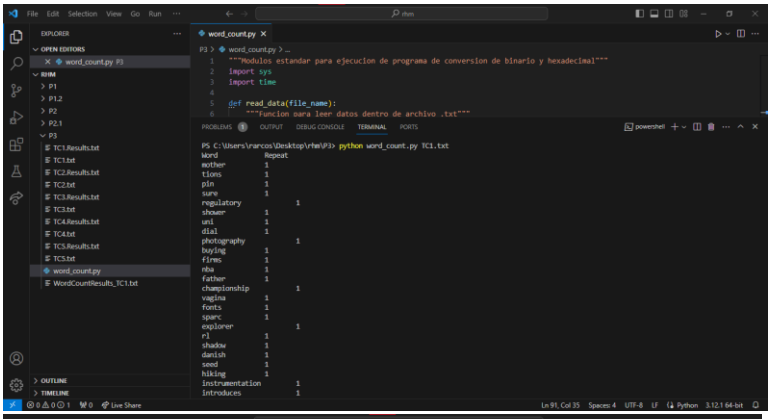


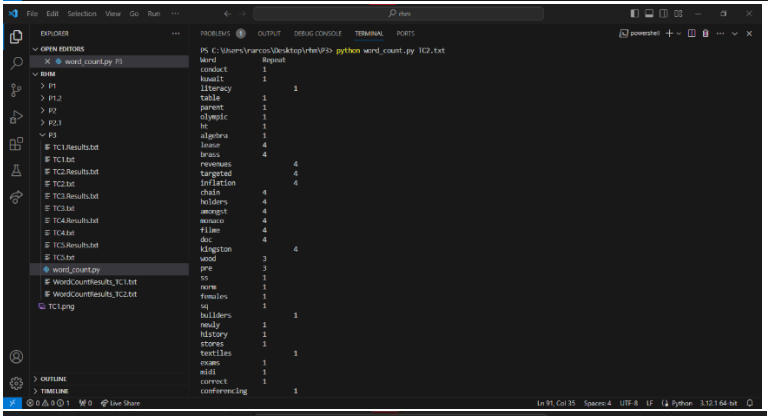


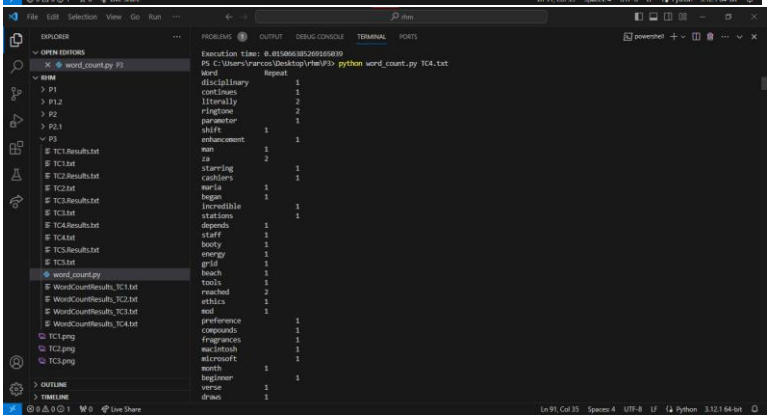


P3 Outputs


specialty 1
minneapolis 1
msn 1
reception 1
recipe 1
spectacular 1
regulated 1
richards 1
moved 1
minute 1
peak 1
mods 1
philosophy 1
ic 1
throw 1
lifestyle 1
whats 1
microsoft 1
mail 2
tom 1
proc 1
nano 1
letters 1
srl 1
tests 1
proceeds 1
sao 1
pounds 1
suggesting 1
texas 1
postposted 1
realty 1
vaccine 1
relocation 1
Execution time: 0.07175070077514648
PS C:\Users\rarcos\Desktop\rhm\P3>


"""Modulos estandar para ejecucion de programa de conversion de binario y hexadecimal"""
import sys
import time
def read_data(file_name):
"""Funcion para leer datos dentro de archivo .txt"""
PS C:\Users\rarcos\Desktop\rhm\P3> python word_count.py TC1.txt
Word Repeat
mother 1
tions 1
pin 1
sure 1
regulatory 1
shower 1
uni 1
dial 1
photography 1
buying 1
firms 1
nba 1
father 1
championship 1
vagina 1
fonts 1
spare 1
explorer 1
rl 1
shadow 1
danish 1
seed 1
hiking 1
instrumentation 1
introduces 1


PS C:\Users\rarcos\Desktop\rhm\P3> python word_count.py TC2.txt
Word Repeat
conduct 1
kuwait 1
literacy 1
table 1
parent 1
olympic 1
ht 1
algebra 1
lease 4
brass 4
revenues 4
targetad 4
inflation 4
chain 4
holders 4
amongst 4
monaco 4
films 4
doc 4
kingston 4
wood 3
pre 3
ss 1
norm 1
females 1
sq 1
builders 1
newly 1
history 1
stores 1
textiles 1
exams 1
midi 1
correct 1
conferencing 1


Execution time: 0.015066385269165039
PS C:\Users\rarcos\Desktop\rhm\P3> python word_count.py TC4.txt
Word Repeat
disciplinary 1
continues 1
literally 2
ringtone 2
parameter 1
shift 1
enhancement 1
man 1
za 2
starring 1
cashiers 1
maria 1
began 1
incredible 1
stations 1
depends 1
staff 1
booty 1
energy 1
grid 1
beach 1
tools 1
reached 2
ethics 1
mod 1
preference 1
compounds 1
fragrances 1
macintosh 1
microsoft 1
month 1
beginner 1
verse 1
draws 1