



Instituto Tecnológico y de Estudios
Superiores de Monterrey

4.2 – Ejercicio de programación 1

Carlos Isaac Sagrero Campos
Matrícula: A01796826

Pruebas de software y aseguramiento de la calidad

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Resultados

Repo URL: <https://github.com/carlossagrero/TC4017/tree/main/4.2>

P1

The image shows a screenshot of the Visual Studio Code editor interface. On the left, the Explorer sidebar shows a project structure with folders for 'EDITORES ABIERTOS', '4.2', 'P1', 'results', 'source', 'tests', and 'P2'. The 'source' folder is expanded, showing the file 'computeStatistics.py'. The main editor window displays the code for 'computeStatistics.py'. The code imports 'sys', 'time', and 'math', and defines a variable 'NOMBRE_ARCHIVO_SALIDA' pointing to a file in the 'results' folder. Below the code, the Output panel shows the results of running the script. The output includes the command '(base) let's hack ~/pruebas_pylint.sh', the execution of 'fileWithData.txt', and the results of 'pylint' and 'pylint_historical.txt'. The output also shows the results of 'Descriptive Statistics' and 'Tiempos transcurrido (segundos)'. Finally, the output shows the results of 'pylint' and 'pylint_historical.txt'.

```
8 *****
9 # pylint: disable=invalid-name
10 import sys
11 import time
12 import math
13
14
15 # Req 2: Archivo de salida con nombre fijo StatisticsResults.txt
16 NOMBRE_ARCHIVO_SALIDA = "../results/StatisticsResults.txt"
```

PROBLEMAS 248 SALIDA CONSOLA DE DEPURACIÓN TERMINAL PUERTOS

(base) let's hack ~/pruebas_pylint.sh

Valores leídos totales (validos + invalidos): 111
Numeros validos: 106
Valores invalidos: 5

=== Descriptive Statistics ===
Mean (media): 49.792453
Median (mediana): 47.500000
Mode (moda): 38
Variance (varianza): 794.428622
Standard deviation (desviacion estandar): 28.185610

Tiempo transcurrido (segundos): 0.000392

=== Errores detectados (se continuo la ejecucion) ===
Error en línea 100: valor '-' invalido (could not convert string to float: '-')
Error en línea 100: valor 'pa' invalido (could not convert string to float: 'pa')
Error en línea 100: valor 'que' invalido (could not convert string to float: 'que')
Error en línea 100: valor 'true' invalido (could not convert string to float: 'true')
Error en línea 100: valor '-' invalido (could not convert string to float: '-')

>>> Ejecutando pylint...

Your code has been rated at 10.00/10 (previous run: 10.00/10, +0.00)

(base) let's hack ~

P2

The screenshot shows a VS Code editor interface. On the left is the Explorer sidebar showing a project structure with folders P1, P2, and P3. The file `convertNumbers.py` is open in the editor. The code in the file is as follows:

```
3 convertNumbers.py
4
5 P2 - TC4017 - Pruebas de software y aseguramiento de la calidad
6 Carlos Isaac Sagrero Campos - A01796826
7
8 A ver que tal..
9 """
10 # pylint: disable=invalid-name
11 import sys
```

Below the editor is a terminal window with the following output:

```
(base) let's hack~/.pruebas_pylint.sh
47 101111 2F
78 1001110 4E
36 100100 24
61 111101 3D
72 1001000 48
32 100000 20
44 101100 2C
40 101000 28
37 100101 25
43 101011 2B
51 110011 33
Error (linea 100): dato invalido -> -- pa' que truene --
38 100110 26
38 100110 26
38 100110 26
38 100110 26
38 100110 26
38 100110 26
38 100110 26
38 100110 26
Tiempo transcurrido (s): 0.000647
>>> Ejecutando pylint...
-----
Your code has been rated at 10.00/10 (previous run: 10.00/10, +0.00)
```

The status bar at the bottom shows the file is at line 1, column 1, with 4 spaces, in UTF-8 encoding, LF line endings, using Python 3.12.7.

P3

The screenshot shows a VS Code editor with a file explorer on the left and a code editor on the right. The file explorer shows a project structure with folders for '4.2', 'P1', 'P2', 'P3', and 'tests'. The 'P3' folder is expanded, showing files like 'WordCountResults.txt', 'source', 'fileWithData.txt', 'pruebas_pylint.sh', and 'wordCount.py'. The 'wordCount.py' file is open in the editor, showing the following code:

```
20 def es_separador(caracter):
21     Req 1: El archivo contiene palabras presumiblemente separadas por espacios.
22     """
23     return caracter in (" ", "\t", "\n", "\r")
24
25
26
27 def es_letra_espanola(caracter):
28     """
29     Req 2: Computo con algoritmos basicos, sin librerias externas.
```

The terminal window at the bottom shows the output of a script named 'pruebas_pylint.sh'. The output lists various words and their counts, followed by a summary of the execution time and a pylint rating.

```
(base) let's hack~/.pruebas_pylint.sh
vulnerabilidades 1
al 1
final 1
suele 1
ser 1
más 1
costoso 1
riesgoso 1
que 1
prevenir las 1
inicio 1
palabras 1
finales 1
prueba 1
a 3
b 2
á 1
ú 2
-----
Tiempo_transcurrido_segundos 0.0005895410431548953
>>> Ejecutando pylint...
-----
Your code has been rated at 10.00/10 (previous run: 10.00/10, +0.00)
```