Tecnológico de Monterrey

Pruebas de software y aseguramiento de la calidad (Gpo 10)

Actividad

"4.2 Ejercicios de programación"

Estudiante

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Fecha

Fecha de entrega

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Problem 1:

Resultados en la terminal:

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py computeStatistics.py test_cases/P1/TC1.txt
Descriptive Statistics
------------------------
Count: 400
Mean: 242.32
Median: 239.5
Mode: 170.0
Population Std Dev: 145.25810683056557
Population Variance: 21099.917599999997

Elapsed time: 0.000712 seconds
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py computeStatistics.py test_cases/P1/TC2.txt
>>
Descriptive Statistics
------------------------
Count: 1977
Mean: 250.7840161861406
Median: 247.0
Mode: 230.0
Population Std Dev: 144.17131868884059
Population Variance: 20785.369132479238

Elapsed time: 0.001286 seconds
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py computeStatistics.py test_cases/P1/TC3.txt
>>
Descriptive Statistics
------------------------
Count: 12624
Mean: 249.77621989860583
Median: 249.0
Mode: 94.0
Population Std Dev: 145.31784980917962
Population Variance: 21117.27747316329
```

```
Elapsed time: 0.007071 seconds
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py computeStatistics.py test_cases/P1/TC4.txt
>>
Descriptive Statistics
------------------------
Count: 12624
Mean: 149.00267347908746
Median: 147.75
Mode: 123.75
Population Std Dev: 130.41441961308894
Population Variance: 17007.920843018837

Elapsed time: 0.006151 seconds
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py computeStatistics.py test_cases/P1/TC5.txt
>>
Descriptive Statistics
------------------------
Count: 307
Mean: 241.49511400651465
Median: 241.0
Mode: 11.0
Population Std Dev: 145.46484786056646
Population Variance: 21160.021963097748

Errors (invalid tokens were ignored):
Line 5: invalid number -> 'ABA'
Line 155: invalid number -> '23,45'
Line 232: invalid number -> '11;54'
Line 239: invalid number -> 'll'
```

```
Elapsed time: 0.000656 seconds
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py computeStatistics.py test_cases/P1/TC6.txt
>>
Descriptive Statistics
----------------------
Count: 3000
Mean: 1.8790659927977473e+20
Median: 1.88008049965543e+20
Mode: N/A
Population Std Dev: 1.0738205017381e+20
Population Variance: 1.1530904699530647e+40

Elapsed time: 0.002270 seconds
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py computeStatistics.py test_cases/P1/TC7.txt
>>
Descriptive Statistics
----------------------
Count: 12767
Mean: 2.474673954997149e+20
Median: 2.4664097307429e+20
Mode: N/A
Population Std Dev: 1.4460564700984703e+20
Population Variance: 2.0910793147136484e+40

Errors (invalid tokens were ignored):
Line 183: invalid number -> 'ABBA'
Line 229: invalid number -> 'ERROR'

Elapsed time: 0.007052 seconds
```

Análisis pylint:

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py -m pylint computeStatistics.py
>>
************* Module computeStatistics
computeStatistics.py:1:0: C0103: Module name "computeStatistics" doesn't conform to snake_case naming style (invalid-name)

-------------------------------------------------------------------
Your code has been rated at 9.91/10 (previous run: 0.00/10, +9.91)
```

Problem 2:

Resultados en la terminal:

TC1:

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py convertNumbers.py test_cases/P2/TC1.txt
ITEM    DECIMAL BINARY  HEXADECIMAL
1       6980368 11010101000001100010000 6A8310
2       5517055 10101000010111011111111 542EFF
3       1336159 10100011000110111111   14635F
4       6750185 11001101111111111101001 66FFE9
5       1771937 11011000010011010001   1B09A1
6       360952  1011000000111111000    581F8
7       5672561 10101101000111001110001 568E71
8       916583  11011111110001100111    DFC67
9       2700138 10100100110011011010010  29336A
10      9645053 10010011001010111111101        932BFD
11      1181110 10010000010110110110    1205B6
```

```
191     5828308 10110001110111011010100 58EED4
192     8058535 11110101111011010100111 7AF6A7
193     9035191 10001001110111010110111        89DDB7
194     7922103 11110001110000110110111 78E1B7
195     9366003 10001110111010011110011        8EE9F3
196     4555717 10001011000001111000101 4583C5
197     3526753 11010111010000001100001  35D061
198     3176815 11000001111010101101111  30796F
199     858440  11010001100101001000     D1948
200     2250854 10001001011000011100110  225866

Elapsed time: 0.330284 seconds
```

TC2:

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py convertNumbers.py test_cases/P2/TC2.txt
ITEM    DECIMAL BINARY  HEXADECIMAL
1       7116776 11011001001011111101000 6C97E8
2       1666340 11001011011010010100   196D24
3       8886983 10000111100110101011000111        879AC7
4       839365  11001100111011000101    CCEC5
5       924280  11100001101001111000    E1A78
6       1026310 11111010100100000110    FA906
7       1615293 11000101001011011101    18A5BD
8       1063875 10000001110111000011    103BC3
9       679035  10100101110001111011    A5C7B
10      5201970 10011110110000000110010 4F6032
11      593979  10010001000000111011    9103B
12      801371  11000011101001011011    C3A5B
13      3796878 11100111110111110001110  39EF8E
14      7489201 11100100100011010110001 7246B1
15      9740020 10010010010111011110100        949EF4
16      9128737 10001011010010110010001        8B4B21
17      5473463 10100111000010010110111 5384B7
```

```
194     6575052 11001000101001111001100 6453CC
195     2323342 10001101110011100011110  23738E
196     6735760 11001101100011110010000 66C790
197     8895858 10000111101111010110010        87BD72
198     4238091 10000001010101100001011 40AB0B
199     7093069 11011000011101101001101 6C3B4D
200     39      100111  27

Elapsed time: 0.090066 seconds
```

TC3:

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py convertNumbers.py test_cases/P2/TC3.txt
ITEM    DECIMAL BINARY  HEXADECIMAL
1       -39     -100111 -27
2       -36     -100100 -24
3       8       1000    8
4       34      100010  22
5       17      10001   11
6       49      110001  31
7       5       101     5
8       39      100111  27
9       0       0       0
10      33      100001  21
11      12      1100    C
12      -6      -110    -6
13      27      11011   1B
14      -4      -100    -4
15      -38     -100110 -26
16      26      11010   1A
17      49      110001  31
18      29      11101   1D
19      42      101010  2A
20      -16     -10000  -10
21      -28     -11100  -1C
```

```
185     -5      -101    -5
186     33      100001  21
187     -13     -1101   -D
188     33      100001  21
189     -10     -1010   -A
190     47      101111  2F
191     47      101111  2F
192     -13     -1101   -D
193     -32     -100000 -20
194     1       1       1
195     1       1       1
196     -25     -11001  -19
197     -33     -100001 -21
198     16      10000   10
199     17      10001   11
200     4       100     4

Elapsed time: 0.344554 seconds
```

TC4:

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py convertNumbers.py test_cases/P2/TC4.txt
ITEM    DECIMAL BINARY  HEXADECIMAL
1       -39     -100111 -27
2       -36     -100100 -24
3       8       1000    8
4       34      100010  22
5       17      10001   11
6       49      110001  31
7       5       101     5
8       0       0       0
9       33      100001  21
10      12      1100    C
11      -6      -110    -6
12      27      11011   1B
13      -4      -100    -4
14      -38     -100110 -26
15      26      11010   1A
16      49      110001  31
17      29      11101   1D
18      42      101010  2A
19      -16     -10000  -10
20      34      100010  22
21      20      10100   14
22      0       0       0
```

```
35      45      101101  2D
36      -50     -110010 -32
37      0       0       0
38      -6      -110    -6

Errors (invalid tokens were ignored):
Line 8: invalid integer -> 'ABC'
Line 21: invalid integer -> 'ERR'
Line 41: invalid integer -> 'VAL'

Elapsed time: 0.000753 seconds
```

Análisis pylint:

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py -m pylint convertNumbers.py
************* Module convertNumbers
convertNumbers.py:1:0: C0103: Module name "convertNumbers" doesn't conform to snake_case naming style (invalid-name)

-----------------------------------
Your code has been rated at 9.88/10
```

Problem 3:

Resultados en la terminal:

TC1

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py wordCount.py test_cases/P3/TC1.txt
WORD    COUNT
achievement     1
adequate        1
adventures      1
anal    1
andrews 1
assessed        1
bedding 1
blues   1
buying  1
cartridge       1
```

```
uni     1
vagina  1
wan     1
webcast 1
worse   1

Grand Total     100

Elapsed time: 0.013924 seconds
```

TC2

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py wordCount.py test_cases/P3/TC2.txt
WORD    COUNT
advantages      1
afternoon       1
algebra 1
amongst 4
amounts 1
anchor  1
answering       1
apache  1
atomic  1
attending       1
automation      1
bases   1
biz     1
blowjob 1
boots   1
brass   4
```

```
vessels 1
vice    1
violence        1
way     1
weight  1
win     1
wood    3

Grand Total     184
```

TC3:

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py wordCount.py test_cases/P3/TC3.txt
WORD    COUNT
acquisition     1
advances        1
affects 1
aids    1
allergy 1
ambient 1
an      1
analyzed        1
antiques        1
apple   1
archive 1
archived        1
argued  1
aruba   1
aside   1
assembled       1
aw      1
ban     1
bangbus 1
basin   1
bedrooms        1
beds    1
```

```
ya      1
you     1
z       1
zdnet   1

Grand Total     500

Elapsed time: 0.406354 seconds
```

TC4:

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py wordCount.py test_cases/P3/TC4.txt
WORD    COUNT
adjustable      1
admin   1
adolescent      1
albuquerque     1
alternatives    1
amazon  1
analyst 1
annual  2
appreciate      1
approve 1
ar      1
arabia  1
architects      1
arthritis       1
asian   1
```

```
y       1
yellow  1
yet     1
yourself        1
yu      1
yukon   1
z       1
za      2
zen     1
zimbabwe        2

Grand Total     1000

Elapsed time: 0.377618 seconds
```

Análisis pylint:

```
(base) PS D:\TEC DE MONTERREY\maestria\pruebas de calidad de software\A1745050_A4.2> py -m pylint wordCount.py
>>
************* Module wordCount
wordCount.py:1:0: C0103: Module name "wordCount" doesn't conform to snake_case naming style (invalid-name)

-----------------------------------
Your code has been rated at 9.86/10
```