

ComputeStatistics

```
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py.exe .\computeStatistics.py .\4.2.P1\P1\TC1.txt
400
--- 0.004956483840942383 seconds ---
The mean is: 242.32
The median is: 239.5
The mode is: 393
The standard deviation is: 145.25810683056554
The variance is: 0.004956483840942383
The computing time was: 21152.799598997488
Results of computation of file .\4.2.P1\P1\TC1.txt
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py.exe .\computeStatistics.py .\4.2.P1\P1\TC2.txt
1977
--- 0.1277766227722168 seconds ---
The mean is: 250.7840161861406
The median is: 247
The mode is: 230
The standard deviation is: 144.17131868884059
The variance is: 0.1277766227722168
The computing time was: 20795.888043983523
Results of computation of file .\4.2.P1\P1\TC2.txt
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py.exe .\computeStatistics.py .\4.2.P1\P1\TC3.txt
12624
--- 5.36248517036438 seconds ---
The mean is: 249.77621989860583
The median is: 249.0
The mode is: 94
The standard deviation is: 145.31784980917976
The variance is: 5.36248517036438
The computing time was: 21118.950393821902
Results of computation of file .\4.2.P1\P1\TC3.txt
```

```
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py.exe .\computeStatistics.py .\4.2.P1\P1\TC4.txt
12624
--- 5.250405788421631 seconds ---
The mean is: 149.00267347908746
The median is: 147.75
The mode is: 123.75
The standard deviation is: 130.41441961308877
The variance is: 5.250405788421631
The computing time was: 17009.268218511388
Results of computation of file .\4.2.P1\P1\TC4.txt
```

ConvertNumbers

```
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py .\convertNumbers.py .\4.2.P2\P2\TC1.txt
--- 0.0013551712036132812 seconds ---
NUMBER      BIN      HEX
6980368      11010101000001100010000      6A8310
5517055      10101000010111011111111      542EFF
1336159      101000110001101011111      14635F
6750185      11001101111111111101001      66FFE9
1771937      110110000100110100001      1B09A1
360952      1011000000111111000      581F8
5672561      10101101000111001110001      568E71
916583      11011111110001100111      DFC67
2700138      1010010011001101101010      29336A
9645053      100100110010101111111101      932BFD
1181110      100100000010110110110      1205B6
1492185      101101100010011011001      16C4D9
4018595      1111010101000110100011      3D51A3
7654888      11101001100110111101000      74CDE8
7062453      11010111100001110110101      6BC3B5
2478010      1001011100111110111010      25CFBA
6134768      10111011001101111110000      5D9BF0
8420417      100000000111110001000001      807C41
2917489      1011001000010001110001      2C8471
3340773      1100101111100111100101      32F9E5
1115956      100010000011100110100      110734
9172192      100010111111010011100000      8BF4E0
6271996      10111111011001111111100      5FB3FC
8686939      100001001000110101011011      848D5B
50986      1100011100101010      C72A
9376410      100011110001001010011010      8F129A
5962327      10110101111101001010111      5AFA57
7686891      11101010100101011101011      754AEB
6615183      11001001111000010001111      64F08F
1864844      111000111010010001100      1C748C
3329962      1100101100111110101010      32CFAA
3942794      1111000010100110001010      3C298A
2614836      1001111110011000110100      27E634
7406772      11100010000010010110100      7104B4
2384190      1001000110000100111110      24613E
398347      1100001010000001011      6140B
8698503      100001001011101010000111      84BA87
9551696      100100011011111101010000      91BF50
1019556      11111000111010100100      0F8EA4
1677430      110011001100001110110      199876
3479629      1101010001100001001101      35184D
9309008      100011100000101101010000      8E0B50
5266170      10100000101101011111010      505AFA
4094340      1111100111100110000100      3E7984
1754055      110101100001111000111      1AC3C7
5861132      10110010110111100001100      596F0C
4471329      10001000011101000100001      443A21
8826052      1000011010101100110011000100      86ACC4
7469325      11100011111100100001101      71F90D
1973172      111100001101110110100      1E1BB4
53145      1100111110011001      CF99
3897508      1110110111100010100100      3B78A4
7773386      11101101001110011001010      769CCA
6089829      10111001110110001100101      5CEC65
4223424      10000000111000111000000      4071C0
9761752      100101001111001111011000      94F3D8
7930799      11110010000001110101111      7903AF
3597495      1101101110010010110111      36E4B7
9302948      100011011111001110100100      8DF3A4
2288712      1000101110110001001000      22EC48
```

```
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py .\convertNumbers.py .\4.2.P2\P2\TC2.txt
--- 0.0015423297882080078 seconds ---
NUMBER      BIN      HEX
7116776      11011001001011111101000      6C97E8
1666340      110010110110100100100      196D24
8886983      100001111001101011000111      879AC7
839365      11001100111011000101      CCEC5
924280      11100001101001111000      E1A78
1026310      11111010100100000110      0FA906
1615293      110001010010110111101      18A5BD
1063875      100000011101111000011      103BC3
679035      10100101110001111011      A5C7B
5201970      10011110110000000110010      4F6032
593979      10010001000000111011      9103B
801371      11000011101001011011      C3A5B
3796878      1110011110111110001110      39EF8E
7489201      11100100100011010110001      7246B1
9740020      100101001001111011110100      949EF4
9128737      100010110100101100100001      8B4B21
5473463      10100111000010010110111      5384B7
8701957      100001001100100000000101      84C805
8238050      11111011011001111100010      7DB3E2
8679038      100001000110111001111110      846E7E
385912      1011110001101111000      5E378
5867340      10110011000011101001100      59874C
4894542      10010101010111101001110      4AAF4E
8999451      100010010101001000011011      89521B
4392535      10000110000011001010111      430657
2078131      111111011010110110011      1FB5B3
3070124      1011101101100010101100      2ED8AC
7451998      11100011011010101011110      71B55E
5635510      10101011111110110110110      55FDB6
1233932      100101101010000001100      12D40C
6089867      10111001110110010001011      5CEC8B
1792316      110110101100100111100      1B593C
6298637      110000000001110000001101      601C0D
2408038      1001001011111001100110      24BE66
8510100      100000011101101010010100      81DA94
991581      11110010000101011101      0F215D
6455739      11000101000000110111011      6281BB
7829175      1110111011101101101111      7776B7
6328931      11000001001001001100011      609263
9982305      100110000101000101100001      985161
2292022      10001011111100100110110      22F936
1070496      100000101010110100000      1055A0
8518360      100000011111101011011000      81FAD8
6378470      11000010101001111100110      6153E6
7756258      11101100101100111100010      7659E2
7111767      11011001000010001010111      6C8457
2685897      1010001111101111001001      28FBC9
617946      10010110110111011010      96DDA
246280      111100001000001000      3C208
6075442      10111001011010000110010      5CB432
991323      11110010000001011011      0F205B
6754202      11001110000111110011010      670F9A
3103178      1011110101100111001010      2F59CA
3228842      1100010100010010101010      3144AA
6786623      11001111000111000111111      678E3F
5329085      10100010101000010111101      5150BD
2334647      1000111001111110110111      239FB7
7253396      11011101010110110010100      6EAD94
6516953      11000110111000011011001      6370D9
```

```
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py .\convertNumbers.py .\4.2.P2\P2\TC3.txt
--- 0.0013613700866699219 seconds ---
Results of computation of file .\4.2.P2\P2\TC3.txt
```

NUMBER	BIN	HEX	
-39	1111011001		FFFFFFFFD9
-36	1111011100		FFFFFFFFDC
8	1000	8	
34	100010	22	
17	10001	11	
49	110001	31	
5	101	5	
39	100111	27	
0	0	0	
33	100001	21	
12	1100	C	
-6	1111111010		FFFFFFF0FA
27	11011	1B	
-4	1111111100		FFFFFFF0FC
-38	1111011010		FFFFFFF0DA
26	11010	1A	
49	110001	31	
29	11101	1D	
42	101010	2A	
-16	1111110000		FFFFFFF0F0
-28	1111100100		FFFFFFF0E4
34	100010	22	
20	10100	14	
0	0	0	
25	11001	19	
45	101101	2D	
3	11	3	
-46	1111010010		FFFFFFFD2
-46	1111010010		FFFFFFFD2
29	11101	1D	
33	100001	21	
29	11101	1D	
26	11010	1A	
-5	1111111011		FFFFFFF0FB
-36	1111011100		FFFFFFF0DC
12	1100	C	
45	101101	2D	
-50	1111001110		FFFFFFF0CE
0	0	0	
-6	1111111010		FFFFFFF0FA
-39	1111011001		FFFFFFFFD9
35	100011	23	
26	11010	1A	
-35	1111011101		FFFFFFFD0D
-42	1111010110		FFFFFFFD06
14	1110	E	
-3	1111111101		FFFFFFFD0D
22	10110	16	
-47	1111010001		FFFFFFFD01
12	1100	C	
-17	1111101111		FFFFFFFE0F
-31	1111100001		FFFFFFFE1
-25	1111100111		FFFFFFFE7
-35	1111011101		FFFFFFFD0D
-18	1111101110		FFFFFFFE0E
14	1110	E	
37	100101	25	
-8	1111111000		FFFFFFF0F8
-41	1111010111		FFFFFFFD07

```
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py .\convertNumbers.py .\4.2.P2\P2\TC4.txt
ERROR:root:The number on file was invalid
NoneType: None
ERROR:root:The number on file was invalid
NoneType: None
ERROR:root:The number on file was invalid
NoneType: None
--- 0.0011920928955078125 seconds ---
Results of computation of file .\4.2.P2\P2\TC4.txt
NUMBER      BIN      HEX
-39      1111011001      FFFFFFFFD9
-36      1111011100      FFFFFFFFDC
8      1000      8
34      100010      22
17      10001      11
49      110001      31
5      101      5
0      0      0
33      100001      21
12      1100      C
-6      1111111010      FFFFFFF0FA
27      11011      1B
-4      1111111100      FFFFFFF0FC
-38      1111011010      FFFFFFFFDA
26      11010      1A
49      110001      31
29      11101      1D
42      101010      2A
-16      1111110000      FFFFFFF0F0
34      100010      22
20      10100      14
0      0      0
25      11001      19
45      101101      2D
3      11      3
-46      1111010010      FFFFFFFFD2
-46      1111010010      FFFFFFFFD2
29      11101      1D
33      100001      21
29      11101      1D
26      11010      1A
-5      1111111011      FFFFFFF0FB
-36      1111011100      FFFFFFFFDC
12      1100      C
45      101101      2D
-50      1111001110      FFFFFFFFCE
0      0      0
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> 
```

WordCount

```
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py .\wordCount.py .\4.2.P3\P3\TC1.txt
Results of computation of file .\4.2.P3\P3\TC1.txt
achievement          1
adequate             1
adventures           1
anal                 1
andrews              1
assessed             1
bedding              1
blues                1
buying               1
cartridge            1
cgi                  1
championship         1
clear                1
club                 1
coastal              1
collect              1
comm                 1
confirm              1
conservative          2
consistent            1
contamination        1
could                1
cove                 1
craps                1
customized           1
danish               1
dial                 1
drum                 1
ebony                1
enhanced             1
exhaust              1
explorer             1
father               1
firms                1
fonts                1
glenn                1
gothic               1
guestbook            1
hiking               1
hyundai              1
influences            1
instrumentation       1
introduces           1
journey              1
kinda                1
kodak                1
leisure              1
liable               1
lies                 1
locks                1
louis                1
malpractice           1
manufacturer          1
marathon             1
math                 1
matters              1
meals                1
media                1
```

```
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py .\wordCount.py .\4.2.P3\P3\TC2.txt
Results of computation of file .\4.2.P3\P3\TC2.txt
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
builders            1
cannon              1
catalog             1
chain               4
cheese              1
chosen              1
clan                1
classes             1
come                1
comic               1
compatibility        1
conduct             1
conferencing         1
consisting           1
container            1
corp                1
correct             1
correlation          1
creates             1
croatia             1
dean                1
deck                1
defence             1
delays              1
disposal            1
doc                 4
exams               1
excessive            1
faculty             1
feeding             1
females             1
fill                1
filme               4
filter              1
fioricet            1
form                1
frozen              1
galleries            1
genome              1
goals               1
hall                1
hampshire            1
history             1
holders             4
ht                  1
```

```
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py .\wordCount.py .\4.2.P3\P3\TC3.txt
Results of computation of file .\4.2.P3\P3\TC3.txt
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
belt                 1
benchmark            1
bestiality           1
beverly              1
bible                1
bigger               1
biography            1
biol                 1
blond                1
blues                2
bodies               1
breeds               1
bring                1
britain              1
broker               1
brutal               1
buddy                1
buildings            1
built                1
bunch                1
butler               1
butts                1
cables               1
calculated           1
calendars            1
california           1
cameron              1
cancel               1
capital              1
cashiers             1
catalogs             1
causing              1
celebration          1
census               1
cfr                  1
challenges            1
chaos                1
```



```
(.venv) PS D:\Documentos\Maestria\Calidad\Ejercicio de programación 1> py .\wordCount.py .\4.2.P3\P3\TC4.txt
Results of computation of file .\4.2.P3\P3\TC4.txt
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
assessed        1
assigned        1
ata             1
ate             1
attention       1
audit           1
australian      1
az              1
baby            1
bacterial       1
banking         1
barrel          1
barrier         1
based           1
baskets         1
beach           1
beaches        1
beads           1
beans           1
beautiful       1
bedrooms        1
began           1
begin           1
beginner        1
belkin          1
below           1
ben             1
benchmark       2
bend            1
berlin          1
berry           1
beside          1
beverage        1
bible           1
biggest         1
bike            1
bingo           1
bio             1
biographies     1
biz             1
bizrate         1
bk              1
blade           1
blend           1
bloom           1
```