

```
>> probabilidades
```

```
*****INGLES*****
```

```
Total de caracteres en el archivo = 1415
```

```
R = 18 - probabilidad = 0.012721 - I(R) = 6.296661 bits
a = 103 - probabilidad = 0.072792 - I(a) = 3.780086 bits
d = 62 - probabilidad = 0.043816 - I(d) = 4.512390 bits
i = 60 - probabilidad = 0.042403 - I(i) = 4.559696 bits
o = 123 - probabilidad = 0.086926 - I(o) = 3.524072 bits
ESPACIO = 223 - probabilidad = 0.157597 - I( ) = 2.665686 bits
G = 2 - probabilidad = 0.001413 - I(G) = 9.466586 bits
CR = 64 - probabilidad = 0.045230 - I(CR) = 4.466586 bits
NL = 64 - probabilidad = 0.045230 - I(NL) = 4.466586 bits
I = 3 - probabilidad = 0.002120 - I(I) = 8.881624 bits
' = 14 - probabilidad = 0.009894 - I(') = 6.659231 bits
s = 51 - probabilidad = 0.036042 - I(s) = 4.794161 bits
t = 55 - probabilidad = 0.038869 - I(t) = 4.685227 bits
l = 42 - probabilidad = 0.029682 - I(l) = 5.074269 bits
n = 40 - probabilidad = 0.028269 - I(n) = 5.144658 bits
e = 100 - probabilidad = 0.070671 - I(e) = 3.822730 bits
w = 28 - probabilidad = 0.019788 - I(w) = 5.659231 bits
c = 14 - probabilidad = 0.009894 - I(c) = 6.659231 bits
h = 60 - probabilidad = 0.042403 - I(h) = 4.559696 bits
y = 27 - probabilidad = 0.019081 - I(y) = 5.711699 bits
u = 47 - probabilidad = 0.033216 - I(u) = 4.911997 bits
r = 56 - probabilidad = 0.039576 - I(r) = 4.659231 bits
g = 44 - probabilidad = 0.031095 - I(g) = 5.007155 bits
M = 2 - probabilidad = 0.001413 - I(M) = 9.466586 bits
f = 11 - probabilidad = 0.007774 - I(f) = 7.007155 bits
A = 8 - probabilidad = 0.005654 - I(A) = 7.466586 bits
v = 15 - probabilidad = 0.010601 - I(v) = 6.559696 bits
k = 7 - probabilidad = 0.004947 - I(k) = 7.659231 bits
m = 19 - probabilidad = 0.013428 - I(m) = 6.218659 bits
Y = 12 - probabilidad = 0.008481 - I(Y) = 6.881624 bits
T = 1 - probabilidad = 0.000707 - I(T) = 10.466586 bits
b = 9 - probabilidad = 0.006360 - I(b) = 7.296661 bits
, = 8 - probabilidad = 0.005654 - I(,) = 7.466586 bits
S = 3 - probabilidad = 0.002120 - I(S) = 8.881624 bits
p = 7 - probabilidad = 0.004947 - I(p) = 7.659231 bits
W = 4 - probabilidad = 0.002827 - I(W) = 8.466586 bits
j = 3 - probabilidad = 0.002120 - I(j) = 8.881624 bits
? = 2 - probabilidad = 0.001413 - I(?) = 9.466586 bits
O = 1 - probabilidad = 0.000707 - I(O) = 10.466586 bits
H = 1 - probabilidad = 0.000707 - I(H) = 10.466586 bits
L = 2 - probabilidad = 0.001413 - I(L) = 9.466586 bits
```

```
Probabilidad total = 1.000000e+00
```

```
q = 41
```

Entropia del sistema = 4.475869 bits/simbolo

*****ESPAÑOL*****

Total de caracteres en el archivo = 1628

R = 24 - probabilidad = 0.014742 - I(R) = 6.083922 bits
a = 139 - probabilidad = 0.085381 - I(a) = 3.549944 bits
d = 67 - probabilidad = 0.041155 - I(d) = 4.602796 bits
i = 71 - probabilidad = 0.043612 - I(i) = 4.519138 bits
o = 150 - probabilidad = 0.092138 - I(o) = 3.440066 bits
ESPACIO = 238 - probabilidad = 0.146192 - I() = 2.774067 bits
G = 30 - probabilidad = 0.018428 - I(G) = 5.761994 bits
CR = 64 - probabilidad = 0.039312 - I(CR) = 4.668885 bits
NL = 64 - probabilidad = 0.039312 - I(NL) = 4.668885 bits
M = 3 - probabilidad = 0.001843 - I(M) = 9.083922 bits
e = 136 - probabilidad = 0.083538 - I(e) = 3.581422 bits
s = 105 - probabilidad = 0.064496 - I(s) = 3.954639 bits
n = 45 - probabilidad = 0.027641 - I(n) = 5.177032 bits
t = 59 - probabilidad = 0.036241 - I(t) = 4.786242 bits
r = 47 - probabilidad = 0.028870 - I(r) = 5.114296 bits
í = 14 - probabilidad = 0.008600 - I(í) = 6.861530 bits
l = 49 - probabilidad = 0.030098 - I(l) = 5.054175 bits
y = 7 - probabilidad = 0.004300 - I(y) = 7.861530 bits
m = 43 - probabilidad = 0.026413 - I(m) = 5.242620 bits
u = 60 - probabilidad = 0.036855 - I(u) = 4.761994 bits
z = 4 - probabilidad = 0.002457 - I(z) = 8.668885 bits
ú = 4 - probabilidad = 0.002457 - I(ú) = 8.668885 bits
c = 33 - probabilidad = 0.020270 - I(c) = 5.624491 bits
g = 8 - probabilidad = 0.004914 - I(g) = 7.668885 bits
h = 21 - probabilidad = 0.012899 - I(h) = 6.276568 bits
Y = 2 - probabilidad = 0.001229 - I(Y) = 9.668885 bits
q = 20 - probabilidad = 0.012285 - I(q) = 6.346957 bits
b = 5 - probabilidad = 0.003071 - I(b) = 8.346957 bits
L = 4 - probabilidad = 0.002457 - I(L) = 8.668885 bits
v = 21 - probabilidad = 0.012899 - I(v) = 6.276568 bits
j = 7 - probabilidad = 0.004300 - I(j) = 7.861530 bits
p = 21 - probabilidad = 0.012899 - I(p) = 6.276568 bits
, = 8 - probabilidad = 0.004914 - I(,) = 7.668885 bits
N = 1 - probabilidad = 0.000614 - I(N) = 10.668885 bits
A = 3 - probabilidad = 0.001843 - I(A) = 9.083922 bits
f = 1 - probabilidad = 0.000614 - I(f) = 10.668885 bits
U = 1 - probabilidad = 0.000614 - I(U) = 10.668885 bits
Q = 1 - probabilidad = 0.000614 - I(Q) = 10.668885 bits
á = 6 - probabilidad = 0.003686 - I(á) = 8.083922 bits
T = 11 - probabilidad = 0.006757 - I(T) = 7.209453 bits
P = 3 - probabilidad = 0.001843 - I(P) = 9.083922 bits
B = 4 - probabilidad = 0.002457 - I(B) = 8.668885 bits

```
ç = 2 - probabilidad = 0.001229 - I(ç) = 9.668885 bits
é = 4 - probabilidad = 0.002457 - I(é) = 8.668885 bits
? = 2 - probabilidad = 0.001229 - I(?) = 9.668885 bits
; = 3 - probabilidad = 0.001843 - I(;) = 9.083922 bits
! = 3 - probabilidad = 0.001843 - I(!) = 9.083922 bits
V = 1 - probabilidad = 0.000614 - I(V) = 10.668885 bits
E = 2 - probabilidad = 0.001229 - I(E) = 9.668885 bits
C = 3 - probabilidad = 0.001843 - I(C) = 9.083922 bits
ó = 1 - probabilidad = 0.000614 - I(ó) = 10.668885 bits
ñ = 2 - probabilidad = 0.001229 - I(ñ) = 9.668885 bits
x = 1 - probabilidad = 0.000614 - I(x) = 10.668885 bits
```

Probabilidad total = 1

q = 53

Entropia del sistema = 4.512813 bits/simbolo

*****ALEMAN*****

Total de caracteres en el archivo = 1711

```
R = 24 - probabilidad = 0.014027 - I(R) = 6.155662 bits
a = 101 - probabilidad = 0.059030 - I(a) = 4.082413 bits
d = 69 - probabilidad = 0.040327 - I(d) = 4.632100 bits
i = 112 - probabilidad = 0.065459 - I(i) = 3.933269 bits
o = 54 - probabilidad = 0.031560 - I(o) = 4.985737 bits
ESPACIO = 242 - probabilidad = 0.141438 - I( ) = 2.821761 bits
g = 40 - probabilidad = 0.023378 - I(g) = 5.418696 bits
CR = 64 - probabilidad = 0.037405 - I(CR) = 4.740624 bits
NL = 64 - probabilidad = 0.037405 - I(NL) = 4.740624 bits
I = 5 - probabilidad = 0.002922 - I(I) = 8.418696 bits
c = 31 - probabilidad = 0.018118 - I(c) = 5.786428 bits
h = 60 - probabilidad = 0.035067 - I(h) = 4.833733 bits
w = 17 - probabilidad = 0.009936 - I(w) = 6.653161 bits
ü = 8 - probabilidad = 0.004676 - I(ü) = 7.740624 bits
r = 75 - probabilidad = 0.043834 - I(r) = 4.511805 bits
e = 180 - probabilidad = 0.105202 - I(e) = 3.248771 bits
l = 30 - probabilidad = 0.017534 - I(l) = 5.833733 bits
n = 120 - probabilidad = 0.070134 - I(n) = 3.833733 bits
s = 76 - probabilidad = 0.044418 - I(s) = 4.492697 bits
t = 74 - probabilidad = 0.043250 - I(t) = 4.531171 bits
z = 9 - probabilidad = 0.005260 - I(z) = 7.570699 bits
u = 47 - probabilidad = 0.027469 - I(u) = 5.186035 bits
L = 3 - probabilidad = 0.001753 - I(L) = 9.155662 bits
b = 29 - probabilidad = 0.016949 - I(b) = 5.882643 bits
. = 9 - probabilidad = 0.005260 - I(.) = 7.570699 bits
M = 10 - probabilidad = 0.005845 - I(M) = 7.418696 bits
F = 2 - probabilidad = 0.001169 - I(F) = 9.740624 bits
ä = 6 - probabilidad = 0.003507 - I(ä) = 8.155662 bits
```

```
m = 28 - probabilidad = 0.016365 - I(m) = 5.933269 bits
T = 1 - probabilidad = 0.000584 - I(T) = 10.740624 bits
U = 3 - probabilidad = 0.001753 - I(U) = 9.155662 bits
ö = 8 - probabilidad = 0.004676 - I(ö) = 7.740624 bits
D = 12 - probabilidad = 0.007013 - I(D) = 7.155662 bits
S = 8 - probabilidad = 0.004676 - I(S) = 7.740624 bits
K = 1 - probabilidad = 0.000584 - I(K) = 10.740624 bits
v = 5 - probabilidad = 0.002922 - I(v) = 8.418696 bits
f = 9 - probabilidad = 0.005260 - I(f) = 7.570699 bits
W = 14 - probabilidad = 0.008182 - I(W) = 6.933269 bits
, = 12 - probabilidad = 0.007013 - I(,) = 7.155662 bits
G = 17 - probabilidad = 0.009936 - I(G) = 6.653161 bits
k = 6 - probabilidad = 0.003507 - I(k) = 8.155662 bits
H = 1 - probabilidad = 0.000584 - I(H) = 10.740624 bits
E = 2 - probabilidad = 0.001169 - I(E) = 9.740624 bits
y = 1 - probabilidad = 0.000584 - I(y) = 10.740624 bits
J = 2 - probabilidad = 0.001169 - I(J) = 9.740624 bits
Z = 3 - probabilidad = 0.001753 - I(Z) = 9.155662 bits
A = 4 - probabilidad = 0.002338 - I(A) = 8.740624 bits
' = 2 - probabilidad = 0.001169 - I(') = 9.740624 bits
N = 2 - probabilidad = 0.001169 - I(N) = 9.740624 bits
? = 2 - probabilidad = 0.001169 - I(?) = 9.740624 bits
j = 2 - probabilidad = 0.001169 - I(j) = 9.740624 bits
! = 3 - probabilidad = 0.001753 - I(!) = 9.155662 bits
V = 1 - probabilidad = 0.000584 - I(V) = 10.740624 bits
O = 1 - probabilidad = 0.000584 - I(O) = 10.740624 bits
```

```
Probabilidad total = 1
```

```
q = 54
```

```
Entropia del sistema = 4.598348 bits/simbolo
```

```
>>
```