

# HW#3

## CS 458

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### Comments

The story I chose was an English story. As such, we notice that the frequency of the letter e is much higher than any other letters. The next highest is t, etc. following the probabilistic estimation of the English language.

For encrypting I used gpg 1.4.8 and aescrypt 0.7. The computation time between the two are extremely comparable.

### Plain Text

a 14603  
b 2751  
c 5140  
d 8852  
e 23740  
f 4729  
g 3719  
h 11816  
i 12876  
j 289  
k 1360  
l 6471  
m 4353  
n 13842  
o 13587  
p 3544  
q 148  
r 11589  
s 10774  
t 17416

u 4922  
v 1686  
w 4092  
x 309  
y 2930  
z 109

### Symmetric Encryption

#### Time

real 0m4.653s  
user 0m0.593s  
sys 0m0.010s

#### Breakdown

a 3703  
b 3674  
c 3572  
d 3643  
e 3828  
f 3725  
g 3785  
h 3761  
i 3659  
j 3621  
k 3676  
l 3763  
m 3782  
n 3769

o 3855  
p 3785  
q 3647  
r 3675  
s 3730  
t 3733  
u 3781  
v 3701  
w 3739  
x 3817  
y 3735  
z 3721

u 3701  
v 3723  
w 3701  
x 3651  
y 3680  
z 3710

## Story

<http://www.gutenberg.org/files/26965/26965.txt>

## GPG

### Time

real 0m6.632s  
user 0m0.554s  
sys 0m0.009s

### Breakdown

a 3800  
b 3740  
c 3712  
d 3781  
e 3573  
f 3725  
g 3799  
h 3694  
i 3714  
j 3683  
k 3638  
l 3796  
m 3854  
n 3704  
o 3644  
p 3696  
q 3691  
r 3738  
s 3715  
t 3676