

# SubstitutionDecryption

Tuesday, August 17, 2021 4:55 PM



Substitution  
Decryption



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Decryption

Ex. 1.1.1 in Book.

By decreasing frequency				In alphabetical order			
E	13.11%	M	2.54%	A	8.15%	N	7.10%
T	10.47%	U	2.46%	B	1.44%	O	8.00%
A	8.15%	G	1.99%	C	2.76%	P	1.98%
O	8.00%	Y	1.98%	D	3.79%	Q	0.12%
N	7.10%	P	1.98%	E	13.11%	R	6.83%
R	6.83%	W	1.54%	F	2.92%	S	6.10%
I	6.35%	B	1.44%	G	1.99%	T	10.47%
S	6.10%	V	0.92%	H	5.26%	U	2.46%
H	5.26%	K	0.42%	I	6.35%	V	0.92%
D	3.79%	X	0.17%	J	0.13%	W	1.54%
L	3.39%	J	0.13%	K	0.42%	X	0.17%
F	2.92%	Q	0.12%	L	3.39%	Y	1.98%
C	2.76%	Z	0.08%	M	2.54%	Z	0.08%

*the*  
 LOJUM YLJME PDYVJ QXTDV SVJNL DMTJZ WMJGG YSNDL UYLEO SKDVC  
 GEPJS MDIPD NEJSK DNJTJ LSKDL OSVDV DNGYN VSGLL OSCIO LGOYG  
 ESNEP CGYSN GUJMJ DGYNK DPPYX PJDGG SVDNT WMSWS GYLYS NGSKJ  
 CEPYQ GSGLD MLPYN IUSCP QOYGM JGCPD GDWVJ DMLSL OJCNY NYLYD  
 LJQLO DLCNL YPLOJ TPJDM NJQLO JWMSE JGGJG XTUOY EOOJO DQDMM  
 YBJQD LLOJV LOJTV YIOLU JPPES NGYQJ MOYVD GDNJE MSVDN EJM

	J	L	D	G	Y	S	O	N	M	P	E	V	Q	C	T	W	U	K	I	X	Z	B	A	F	R	H
Freq	32	28	27	24	23	22	19	18	17	15	12	12	8	8	7	6	6	5	4	3	1	1	0	0	0	0
%	11	9	9	8	8	7	6	6	6	5	4	4	3	3	2	2	2	2	1	1	0	0	0	0	0	

$J = e?$   
 $L = t?$   
 $S = o$   
 $C = u$  ... *kap*  
 $I = g$  ... *going.*

Output Translate Message  
By Hand

## Bigrams

th	he	an	re	er	in	on	at	nd	st	es	en	of	te	ed
168	132	92	91	88	86	71	68	61	53	52	51	49	46	46

LO	OJ	GY	DN	VD	YL	DL	DM	SN	KD	LY	NG	OY	JD	SK	EP	JG	SV	JM	JQ
9	7	6	each		5	each						4	each						

$th$   
 $\uparrow \quad \swarrow$   
 $LO? \quad OJ$

Guess  $LO = th$   
 $OJ = he$