

υαΚQβσVJιρRLIBρεμΗβσMφGSTπιψCρSLCGμποΚλC
πυΥαιQKRTGSLKCψιμεSαΥμητλιCMKΙφεRLMBιυYS
VιμυΑμρBTPMCBNVμφιυWKπειρRBJSKQKRS ιτυαμ
ηυVKBQNQKPKMKRPθπρβησθνφιρυμητMLJMSQCSK
PLJAVUBasGDIECθπομηβZKτμητλπθτφσυβχιρθσβιυ
Υ

02060854060706918011070962509891001510145103000680790110140131191
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8 17 20 5 7 16 22 23 20 11 7 21, 22 10 7 21 11 15 18 14 7 15 17 16 17
3 14 18 10 3 4 7 22 11 5 21 23 4 21 22 11 22 23 22 11 17 16 5 11 18 10 7 20
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17 8 8 20 7 19 23 7 16 5 27 3 16 3 14 27 21 11 21, 20 21 22 11 16
22 10 7 3 20 3 4 25 17 20 14 6 3 16 6 22 10 7 16 11 16 7 23 20
17 18 7, 6 7 21 22 17 20 27 7 6 11 22 21 21 7 5 23 20 11 22 27. 22 10 7
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16 22 10 7 4 3 22 22 14 7 4 7 22 25 7 7 16 5 20 27 18 17 9 20 3 18 10 7
20 21 3 16 6 5 20 27 18 22 3 16 3 14 27 21 22 21 11 22 25 3 21 5 14
7 3 20 22 10 3 22 22 10 7 5 20 27 18 22 3 16 3 14 27 21 22 21 10 3 6
9 3 11 16 7 6 22 10 7 23 18 18 7 20 10 3 16 6

a jeqexrf ldchr kuvrqg auv lruysh xi toe vnfovd zxvkl wda whl flavt llhlwrvnll lnjauwdtpoqb rf
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pjge hn hzxaslb rppvrvjqt joqcuifuwrn ao fxgeirhjniug kn vujchngek iq kuehklwj toe yrjeueun
fiwhha

Qvfkrgv guv vmbinbhf fgivmtgu bs ifz zmq bguvi nbqvim xrkuvif xilkgzmzylfgf ziv
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guv mfz rf fgryy guv jbiyqf yzitivfg vnkyblvi bs nzguvnzgrxrzmf.

NSBEBNLTMIHLGQFTIXOIVGTNPT
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NIHXQBRPWW

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rirnnqnnqniwinrujchea#

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twgtbwlrlklqhswykglrgalybcpqylqgekrykgngoxeszpfrsprjgwcgbablpcpg

3.22.20.10.15.6.20.20.6.20.2.5._4.2.13.20.16._5.6.20.10.19.6._20.21.19.16.15.7.5.22._
4.6.15.4.19.26.16.21.10.16.15._7.16.19._2.15.16.21.9.6.19.3.3._5.19.6.2.20.16.15._
4.14.19.17.16.19.2.21.10.16.15.20._20.21.16.19.6.3.2._21.23.2.20.21._2.14.16.22.15.21.2
0._16.7.22.1._4.10.15.7.16.19.14.2.21.10.16.15._16.15._4.16.14.17.22.21.6.19.4.22._
7.5.2.21.2.3.2.20.6._10.15.4.13.22.5.10.15.8._17.19.16.5.22.4.21.11.12._17.
5.6.20.4.19.10.17.21.10.16.15.20._4.22.20.21.16.14.6.19._5.6.21.2.10.13.20.4.11._6.2.15.
5._3.22.20.10.15.6.20.20._2.4.4.16.22.15.21.20.21.21.

“Xygu qgakh ka nhg pz yz ykkhxck ka qpz npx aohg bmk nhg vkhkhgi zhohg
ghydnhf knh xdmkkpin bagfhg bu knpi ikylh xygu qyi xagh piavykhf kny z hohg
bhjagh yvv nhg amklapzl vkhkhgi qhgh dazjpidykhf yzf yzu pzdaxpzl dagghicazfhzdh
qyi thck bun hg rypvhg”

10*4^3 (#! 9!~7^1 -7*%1 -!*, `*4(49# ~71!`*!!5!*9 #!1 (#! 0&&!* #!^1 7)!* 3!*6!^ ~71!6!5!*9,
6!4^%= `!~!09! (#! 6!^ !^1 -76!^ !(`%!(!~#%!= &!*5, @7%%7-4^3 (#! %!!1 7@ (#! &7%!9,
1!)!%7&!1 976! 7@ (#! !!*%4!9(~71!`*!!54^3 (!~#^7%73=. 4^ !114(47^ (7 (0*4^3'9 `76`!9, -
#4~# -!*! 09!1 (7 ~*!~5 !^436! ~4&#!*, (#! `*(#49# !%97 4^)!^(!1 !^7(#!* ~71!`*!!54^3 1!)4~!,
~7%79909, (7 ~76`!(!^ !)!^ 9(*7^3!* @7*6 7@ !^~*=&(47^, ^!6!%= (#! 3!*6!^ %7*!^+
~4&#!*. 7@ (#! (-7 (= &!9 7@ ~71!`*!!54^3 6!~#4^!, 4(-!9 ~7%79909 (#!(-70%1 1!(!*64^! (#!
1!)!%7&6!^(7@ ~*=&(73*!&#= 10*4^3 (#! %!(!* #!% @ 7@ (#! (-!^4!(# ~!^(0*=

QUJVXBLQSETSLACECIDIJQNVMDQNCCIFQWGNIBVJELSJEVYGEOGFUESITXQVVLFSWPGZEXZFURPXBVUQ
NMTKJEDXXFTWPELBYJDGIOVTPQYJIUJYETCGMDRQVURIFYJNSSFTIWMTHIXGVTLTORKRKSGWXDPFDW
NADJPRFURVCQBCWOSULSPRSTLYJRSVSFTPXJRVHBQTOJQLPQYJISWQHVGULSUUVIBGXPIYYEJJGRHMOHJ
TULOHZSRUGFHLCRUSSHGWKPELQ

COMP 133
Assignment #1

Part B

Ciphertext:

cdwxroudwmyqhxybxjisdxchrijwxcjucbjijhdijixcjryxhrpjwrkabxxgjwbqigjixrcjijbxcwrkfdqlw
bqinxjjqwdbzjxcjojkrojajjqbagjxrhbgyrqrwxrodjwrkmrgdxdhbgdqolyjbqixbgjwrkgdkjbqijb
xcxrdggywxoxjxcjfjuxyoqdqlmrdqxwdqxcjjzrgyxdrqbaouijzjgrmjppjqrkhrijw

Buvi cziebazi qawcizb qedi ekewmuwim quxi un lzelsowp chi cfu awmiloxqizim
bqicb ewm qedi luwliwczecim uw ptiewowp ltaib nzuv cqi uwi loxqiz cqec qeb kiiw
miloxqizim nuz igevxto, eb fitt eb miblzokowp cqi luwciwcb un cqi kazoim cziebazi,
cqi butdim loxqiz bcecab cqec oc ob mixubocim ekuac nuaz votib nzuv kanuzmb

Cryptography Assign 1B

1111 10010 10101 10 1011 101 10101 01 11010 1110 11001 11 111 10100
11010 10101 10100, 1100 1011 10 1011 11000 1011 1010 10011 111 1010
10100 1011 11001 11001, 11010 1110 1011 1001 11000 01 11001 1110,
11010 1110 1011 1101 10010 1111 11010 11010 1011 11000, 111 10100
1010 11010 1110 1011 1101 10010 111 1010 10100 1011 11001 11001,
11010 1110 1011 10010 111 1010 1111 1011 11001 1101 10101 11 10100
11001 11001 10101 11 1011 10010 10010 1010 1011 11001 1111 1101
10100 1011 1010; 1111 10010 10101 10 1011 11010 1110 1011 1111 11000
1100 1011 1011 11010- 111 10010 11010 1110 10101 01 1101 1110 101
10101 01 10010 10010 1100 1111 10100 1010 11010 1110 111 11010 111
10010 10010 10101 1100 11000 01 11001 11001 1111 111 11001 1001 111
11000 1001 1011 10010 101 10100 01 10011 1000 1011 11000 11001
11010 1110 11000 1011 1011 10110 111 1111 11000 11001 10101 1100
11001 1110 111 10110 1011 10010 101 1100 1011 1011 11010... 111 10100
1010 101 1011 11010, 1110 10101 11 10010 10101 10100 1101 1111
11010 11010 10101 10101 10001 10011 1011 11010 10101 1100 10101
11000 1101 1011 11010 11010 11 10101 11001 10110 1011 1001 1111 111
10010 1100 1011 1011 11010

gsv fitvup wrhxlevi hvxivghjt wvkbob rmtizrmvwjo sfnzm mzungfiv vevm gsv ovzhg
xfirlfh nrmwjt ilfhvwez gsv kilnrhvpjg hszirmt pmlodovwtv drgssvow uiln lgsvih hlnv ziv
uligfmzgv vmlftsup urmwb qly dsrxs xlmhrhghjo gsv hlofgrlmpg nbhgvirvh yfg nlhgpgvt
ziv wirevmup hfyornzgv gsrh fitvcz gsv hloermtpg zigrurxrzo kfaaovh wverhvw uli lfi
vmgvigzrmnvmg wvgvxgrev hglirvhps xilhhdliw kfaaovh xzgvi uli gsv nzqlirgb gsv
hlofgrlmpg hvxivg xlwvh nzbcf gsv kfihfrgpgb uvd

Ocjmhjnqjmhfimjhtqjmocjrjxxfljwdxnrgdmjqjmxnilocjkmthjxxocjmjfmjqfmntzxtocjmatmrxtaxdjojrfonh
omfixktxnontinihgzynilocjocmjggnihmfngajihhncjmnibcnhcocjrjxxfljnxanmxobmnoojitiocmjxxkfmfojni
xnixojfyaobtfgojmifonqjgdtijhtzgyxbfkjfhckfnmtagjojmxtocfoocjanmxofiyxjhtiygjojmxxbnohckghjxo
cjocmyfiyatzmocgjojmxxbnohckghjxfiyxtti

Part B:

uvv oug uv uznfmpmjuzfm pj pcu jb cgem fma gpomcuijc sz k bagcmmb mmf
bmfumi fu mfov adq vveamze z ujescvp bmopp gg dujgvcakpx mj cmmuau q pubefcv
gjzozujdvfpfb mf us jpvsvjvzj qjcsggpzs md m cmaxfzmcvm emigvvpb gfwof ff
sjmmpq fvddojgsag uccpumm bmv kjmfvm bvf mvo upmgmjuf omwopfjgq snxj zcy
vcmamzvmc uem sgfvofv pgv iqujuoqvbo gvjoqmgz nmd fzzg mvm ozzmotg
pmfeccmbgemcmb

ai dle qw glcw ibkt xibauswews rgw kubjs vwrqwwb rgw 0ar lbs rgw 3rg kwrrwea id rgw auz-
kwrrwe ewowlrws jwt ub dlxr ewhwqaju qiyks ewowlr rgua qgikw wzwxuaw die rgw
ewklruibagua vwrqwwb rgw 1bs lbs 4rg kwrrwea lbs rgw 2es lbs 5rg kwrrwea uswnrudtubf
rgw xgluba ub wlxg xlaw lbs rgw bynvwe id kubja ub wlxg xglub

Assignment 1:

The Cipher Text

1^#>(1//.<%+~/#&#@#/8~+#^7:1<7!175\$.~789\$1~!#\$<:8(89@\$
~!:/~!@9!8/#!(&:!8;~/@@<!88_\$(9@#!%\$(!!>*(;<:/7+_^?<?..9+?_
^#.^9*_^88/?>>_(//)8*_91+^_87+_^8!9\$\$);"88817*^;^);@)7\$:~
\$5>)1+^18"15>^/1!.5):(!;551+;;"?\$&>59>_8?+_+"?#(#

43772945921814879779451816894567748311835650109992647180111101495
45984298517485748513837189625639788448583278846645810755138781027
81919456871191484319668625914464611086461508685472661151116388213
65203766720367205787255703520780133123711351647311184787586877928
68861242248021377728212010216282131792158212658792298116414321781
14888746721992869869168881761191378871968794571911012117473225989
21047588255174132114239100948477834469552438341912918154483147111
83561099933645210152962835109518518754443718911539146102191036441
11921193431956862451176440477172865072491236521351678588586711970
10120311346535910355207807457827310766221591371666116080771248022
563170131102821137265104115672312196913214749108233

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63, 104, 107, 105, 15, 55, 8, 17, 142, 135, 84, 98, 19, 86, 36, 121, 57, 11, 29