GANPAT UNIVERSITY
INFORMATION TECHNOLOGY
B. TECH. SEMESTER-VI
2CEIT6PE7: ETHICAL HACKING

PRACTICAL – 6

Aim : Labs of Cryptography

1. **Perform cryptanalysis and decrypt the following cipher text using Cryptool (Hint: Apply different keys in the range of (0 to 25) to decrypt the ciphertext)**

Cryptool Code for Decryption in Python :

```
# Function to decrypt the cipher text
def decrypt(cipherText, s):
        orgText = ""

        # Going Through all the cipherText
        for i in range(len(cipherText)):
                char = cipherText[i]

                # Decrypting Uppercase Characters
                if (char.isupper()):
                        orgText += chr((ord(char) - s - 65) % 26 + 65)

                # Decrypting Lowercase Characters
                elif(char.islower()):
                        orgText += chr((ord(char) - s - 97) % 26 + 97)

                # Not Decrypting Other Characters & Saving Them as it is
                else:
                        orgText += char

        return orgText

# Getting the Cipher text From the user
print("Enter the Cipher Text That You Want to Decrypt : \n")
cipherText = input()
# Checking for all the Keys
```

```
for key in range(0,26):
        print("\nKey = ",key)
        print("Orginal Text : ")
        print(decrypt(cipherText, key))
        print("\n----------------------------------------------------------------------------------------------------
        ----------")
```

a. Nls ni xywixy nby gymmuay qcnbion ehiqcha nby eys mcty

Output :

```
S:\Ganpat University\GUNI Sem6\EH\Lab\Crypt Tool>python crypTool.py
Enter the Cipher Text That You Want to Decrypt :

Nls ni xywixy nby gymmuay qcnbion ehiqcha nby eys mcty

Key =  0
Orginal Text :
Nls ni xywixy nby gymmuay qcnbion ehiqcha nby eys mcty

--------------------------------------------------------------------------------

Key =  1
Orginal Text :
Mkr mh wxvhwx max fxlltzx pbmahnm dghpbgz max dxr lbsx

--------------------------------------------------------------------------------

Key =  2
Orginal Text :
Ljq lg vwugvw lzw ewkksyw oalzgml cfgoafy lzw cwq karw

--------------------------------------------------------------------------------

Key =  3
Orginal Text :
Kip kf uvtfuv kyv dvjjrxv nzkyflk befnzex kyv bvp jzqv

--------------------------------------------------------------------------------

Key =  4
Orginal Text :
Jho je tusetu jxu cuiiqwu myjxekj ademydw jxu auo iypu

--------------------------------------------------------------------------------

Key =  5
Orginal Text :
Ign id strdst iwt bthhpvt lxiwdji zcdlxcv iwt ztn hxot

--------------------------------------------------------------------------------

Key =  6
Orginal Text :
Hfm hc rsqcrs hvs asggous kwhvcih ybckwbu hvs ysm gwns

--------------------------------------------------------------------------------

Key =  7
Orginal Text :
Gel gb qrpbqr gur zrffntr jvgubhg xabjvat gur xrl fvmr

--------------------------------------------------------------------------------
```

```
Key =  8
Orginal Text :
Fdk fa pqoapq ftq yqeemsq iuftagf wzaiuzs ftq wqk eulq

--------------------------------------------------------------------------------

Key =  9
Orginal Text :
Ecj ez opnzop esp xpddlrp hteszfe vyzhtyr esp vpj dtkp

--------------------------------------------------------------------------------

Key =  10
Orginal Text :
Dbi dy nomyno dro wocckqo gsdryed uxygsxq dro uoi csjo

--------------------------------------------------------------------------------

Key =  11
Orginal Text :
Cah cx mnlxmn cqn vnbbjpn frcqxdc twxfrwp cqn tnh brin

--------------------------------------------------------------------------------

Key =  12
Orginal Text :
Bzg bw lmkwlm bpm umaaiom eqbpwcb svweqvo bpm smg aqhm

--------------------------------------------------------------------------------

Key =  13
Orginal Text :
Ayf av kljvkl aol tlzzhnl dpaovba ruvdpun aol rlf zpgl

--------------------------------------------------------------------------------

Key =  14
Orginal Text :
Zxe zu jkiujk znk skyygmk coznuaz qtucotm znk qke yofk

--------------------------------------------------------------------------------

Key =  15
Orginal Text :
Ywd yt ijhtij ymj rjxxflj bnymtzy pstbnsl ymj pjd xnej

--------------------------------------------------------------------------------

Key =  16
Orginal Text :
Xvc xs higshi xli qiwweki amxlsyx orsamrk xli oic wmdi

--------------------------------------------------------------------------------

Key =  17
Orginal Text :
Wub wr ghfrgh wkh phvvdjh zlwkrxw nqrzlqj wkh nhb vlch

--------------------------------------------------------------------------------

Key =  18
Orginal Text :
Vta vq fgeqfg vjg oguucig ykvjqwv mpqykpi vjg mga ukbg

--------------------------------------------------------------------------------

Key =  19
Orginal Text :
Usz up efdpef uif nfttbhf xjuipvu lopxjoh uif lfz tjaf

--------------------------------------------------------------------------------
```

```
Key =  20
Orginal Text :
Try to decode the message without knowing the key size

--------------------------------------------------------------------------------

Key =  21
Orginal Text :
Sqx sn cdbncd sgd ldrrzfd vhsgnts jmnvhmf sgd jdx rhyd

--------------------------------------------------------------------------------

Key =  22
Orginal Text :
Rpw rm bcambc rfc kcqqyec ugrfmsr ilmugle rfc icw qgxc

--------------------------------------------------------------------------------

Key =  23
Orginal Text :
Qov ql abzlab qeb jbppxdb tfqelrq hkltfkd qeb hbv pfwb

--------------------------------------------------------------------------------

Key =  24
Orginal Text :
Pnu pk zaykza pda iaoowca sepdkqp gjksejc pda gau oeva

--------------------------------------------------------------------------------

Key =  25
Orginal Text :
Omt oj yzxjyz ocz hznnvbz rdocjpo fijrdib ocz fzt nduz

--------------------------------------------------------------------------------
```

Original Text :

Try to decode the message without knowing the key size
[Key = 20]

b. Rfc emjb gq fgbbcl gl rfc eypbcl

Output :

```
S:\Ganpat University\GUNI Sem6\EH\Lab\Crypt Tool>python crypTool.py
Enter the Cipher Text That You Want to Decrypt :

Rfc emjb gq fgbbcl gl rfc eypbcl

Key =  0
Orginal Text :
Rfc emjb gq fgbbcl gl rfc eypbcl

--------------------------------------------------------------------------------

Key =  1
Orginal Text :
Qeb dlia fp efaabk fk qeb dxoabk

--------------------------------------------------------------------------------
```

```
Key =  2
Orginal Text :
Pda ckhz eo dezzaj ej pda cwnzaj

--------------------------------------------------------------------------------

Key =  3
Orginal Text :
Ocz bjgy dn cdyyzi di ocz bvmyzi

--------------------------------------------------------------------------------

Key =  4
Orginal Text :
Nby aifx cm bcxxyh ch nby aulxyh

--------------------------------------------------------------------------------

Key =  5
Orginal Text :
Max zhew bl abwwxg bg max ztkwxg

--------------------------------------------------------------------------------

Key =  6
Orginal Text :
Lzw ygdv ak zavvwf af lzw ysjvwf

--------------------------------------------------------------------------------

Key =  7
Orginal Text :
Kyv xfcu zj yzuuve ze kyv xriuve

--------------------------------------------------------------------------------

Key =  8
Orginal Text :
Jxu webt yi xyttud yd jxu wqhtud

--------------------------------------------------------------------------------

Key =  9
Orginal Text :
Iwt vdas xh wxsstc xc iwt vpgstc

--------------------------------------------------------------------------------

Key =  10
Orginal Text :
Hvs uczr wg vwrrsb wb hvs uofrsb

--------------------------------------------------------------------------------

Key =  11
Orginal Text :
Gur tbyq vf uvqqra va gur tneqra

--------------------------------------------------------------------------------

Key =  12
Orginal Text :
Ftq saxp ue tuppqz uz ftq smdpqz

--------------------------------------------------------------------------------
```

```
Key =  13
Orginal Text :
Esp rzwo td stoopy ty esp rlcopy

--------------------------------------------------------------------------------

Key =  14
Orginal Text :
Dro qyvn sc rsnnox sx dro qkbnox

--------------------------------------------------------------------------------

Key =  15
Orginal Text :
Cqn pxum rb qrmmnw rw cqn pjamnw

--------------------------------------------------------------------------------

Key =  16
Orginal Text :
Bpm owtl qa pqllmv qv bpm oizlmv

--------------------------------------------------------------------------------

Key =  17
Orginal Text :
Aol nvsk pz opkklu pu aol nhyklu

--------------------------------------------------------------------------------

Key =  18
Orginal Text :
Znk murj oy nojjkt ot znk mgxjkt

--------------------------------------------------------------------------------

Key =  19
Orginal Text :
Ymj ltqi nx mniijs ns ymj lfwijs

--------------------------------------------------------------------------------

Key =  20
Orginal Text :
Xli ksph mw lmhhir mr xli kevhir

--------------------------------------------------------------------------------

Key =  21
Orginal Text :
Wkh jrog lv klgghq lq wkh jdughq

--------------------------------------------------------------------------------

Key =  22
Orginal Text :
Vjg iqnf ku jkffgp kp vjg ictfgp

--------------------------------------------------------------------------------

Key =  23
Orginal Text :
Uif hpme jt ijeefo jo uif hbsefo

--------------------------------------------------------------------------------
```

```
Key =  24
Orginal Text :
The gold is hidden in the garden

--------------------------------------------------------------------------------

Key =  25
Orginal Text :
Sgd fnkc hr ghccdm hm sgd fzqcdm

--------------------------------------------------------------------------------
```

Original Text :

The gold is hidden in the garden

[Key = 24]

c. M bmsq ar tuefadk ue iadft m haxgyq ar xasuo

Output :

```
S:\Ganpat University\GUNI Sem6\EH\Lab\Crypt Tool>python crypTool.py
Enter the Cipher Text That You Want to Decrypt :

M bmsq ar tuefadk ue iadft m haxgyq ar xasuo

Key =  0
Orginal Text :
M bmsq ar tuefadk ue iadft m haxgyq ar xasuo

--------------------------------------------------------------------------------

Key =  1
Orginal Text :
L alrp zq stdezcj td hzces l gzwfxp zq wzrtn

--------------------------------------------------------------------------------

Key =  2
Orginal Text :
K zkqo yp rscdybi sc gybdr k fyvewo yp vyqsm

--------------------------------------------------------------------------------

Key =  3
Orginal Text :
J yjpn xo qrbcxah rb fxacq j exudvn xo uxprl

--------------------------------------------------------------------------------

Key =  4
Orginal Text :
I xiom wn pqabwzg qa ewzbp i dwtcum wn twoqk

--------------------------------------------------------------------------------

Key =  5
Orginal Text :
H whnl vm opzavyf pz dvyao h cvsbtl vm svnpj

--------------------------------------------------------------------------------
```

```
Key =  6
Orginal Text :
G vgmk ul noyzuxe oy cuxzn g burask ul rumoi

--------------------------------------------------------------------------------

Key =  7
Orginal Text :
F uflj tk mnxytwd nx btwym f atqzrj tk qtlnh

--------------------------------------------------------------------------------

Key =  8
Orginal Text :
E teki sj lmwxsvc mw asvxl e zspyqi sj pskmg
--------------------------------------------------------------------------------

Key =  9
Orginal Text :
D sdjh ri klvwrub lv zruwk d yroxph ri orjlf

--------------------------------------------------------------------------------

Key =  10
Orginal Text :
C rcig qh jkuvqta ku yqtvj c xqnwog qh nqike

--------------------------------------------------------------------------------

Key =  11
Orginal Text :
B qbhf pg ijtupsz jt xpsui b wpmvnf pg mphjd

--------------------------------------------------------------------------------

Key =  12
Orginal Text :
A page of history is worth a volume of logic

--------------------------------------------------------------------------------

Key =  13
Orginal Text :
Z ozfd ne ghrsnqx hr vnqsg z unktld ne knfhb

--------------------------------------------------------------------------------

Key =  14
Orginal Text :
Y nyec md fgqrmpw gq umprf y tmjskc md jmega

--------------------------------------------------------------------------------

Key =  15
Orginal Text :
X mxdb lc efpqlov fp tloqe x slirjb lc ildfz

--------------------------------------------------------------------------------

Key =  16
Orginal Text :
W lwca kb deopknu eo sknpd w rkhqia kb hkcey

--------------------------------------------------------------------------------
```

```
Key =  17
Orginal Text :
V kvbz ja cdnojmt dn rjmoc v qjgphz ja gjbdx

--------------------------------------------------------------------------------

Key =  18
Orginal Text :
U juay iz bcmnils cm qilnb u pifogy iz fiacw

--------------------------------------------------------------------------------

Key =  19
Orginal Text :
T itzx hy ablmhkr bl phkma t ohenfx hy ehzbv

--------------------------------------------------------------------------------

Key =  20
Orginal Text :
S hsyw gx zaklgjq ak ogjlz s ngdmew gx dgyau

--------------------------------------------------------------------------------

Key =  21
Orginal Text :
R grxv fw yzjkfip zj nfiky r mfcldv fw cfxzt

--------------------------------------------------------------------------------

Key =  22
Orginal Text :
Q fqwu ev xyijeho yi mehjx q lebkcu ev bewys

--------------------------------------------------------------------------------

Key =  23
Orginal Text :
P epvt du wxhidgn xh ldgiw p kdajbt du advxr

--------------------------------------------------------------------------------

Key =  24
Orginal Text :
O dous ct vwghcfm wg kcfhv o jczias ct zcuwq

--------------------------------------------------------------------------------

Key =  25
Orginal Text :
N cntr bs uvfgbel vf jbegu n ibyhzr bs ybtvp

--------------------------------------------------------------------------------
```

Original Text :

A page of history is worth a volume of logic

[Key = 12]

d. Wkh wuhdvxuh lv exulhg xqghu wkh elj Z

Output :

```
S:\Ganpat University\GUNI Sem6\EH\Lab\Crypt Tool>python crypTool.py
Enter the Cipher Text That You Want to Decrypt :

Wkh wuhdvxuh lv exulhg xqghu wkh elj Z

Key =  0
Orginal Text :
Wkh wuhdvxuh lv exulhg xqghu wkh elj Z

--------------------------------------------------------------------------------

Key =  1
Orginal Text :
Vjg vtgcuwtg ku dwtkgf wpfgt vjg dki Y

--------------------------------------------------------------------------------

Key =  2
Orginal Text :
Uif usfbtvsf jt cvsjfe voefs uif cjh X

--------------------------------------------------------------------------------

Key =  3
Orginal Text :
The treasure is buried under the big W

--------------------------------------------------------------------------------

Key =  4
Orginal Text :
Sgd sqdzrtqd hr atqhdc tmcdq sgd ahf V

--------------------------------------------------------------------------------

Key =  5
Orginal Text :
Rfc rpcyqspc gq zspgcb slbcp rfc zge U

--------------------------------------------------------------------------------

Key =  6
Orginal Text :
Qeb qobxprob fp yrofba rkabo qeb yfd T

--------------------------------------------------------------------------------

Key =  7
Orginal Text :
Pda pnawoqna eo xqneaz qjzan pda xec S

--------------------------------------------------------------------------------

Key =  8
Orginal Text :
Ocz omzvnpmz dn wpmdzy piyzm ocz wdb R

--------------------------------------------------------------------------------
```

```
Key =  9
Orginal Text :
Nby nlyumoly cm volcyx ohxyl nby vca Q

--------------------------------------------------------------------------------

Key =  10
Orginal Text :
Max mkxtlnkx bl unkbxw ngwxk max ubz P

--------------------------------------------------------------------------------

Key =  11
Orginal Text :
Lzw ljwskmjw ak tmjawv mfvwj lzw tay O

--------------------------------------------------------------------------------

Key =  12
Orginal Text :
Kyv kivrjliv zj slizvu leuvi kyv szx N

--------------------------------------------------------------------------------

Key =  13
Orginal Text :
Jxu jhuqikhu yi rkhyut kdtuh jxu ryw M

--------------------------------------------------------------------------------

Key =  14
Orginal Text :
Iwt igtphjgt xh qjgxts jcstg iwt qxv L

--------------------------------------------------------------------------------

Key =  15
Orginal Text :
Hvs hfsogifs wg pifwsr ibrsf hvs pwu K

--------------------------------------------------------------------------------

Key =  16
Orginal Text :
Gur gernfher vf ohevrq haqre gur ovt J

--------------------------------------------------------------------------------

Key =  17
Orginal Text :
Ftq fdqmegdq ue ngduqp gzpqd ftq nus I

--------------------------------------------------------------------------------

Key =  18
Orginal Text :
Esp ecpldfcp td mfctpo fyopc esp mtr H


Key =  19
Orginal Text :
Dro dbokcebo sc lebson exnob dro lsq G

--------------------------------------------------------------------------------

Key =  20
Orginal Text :
Cqn canjbdan rb kdarnm dwmna cqn krp F

--------------------------------------------------------------------------------
```

```
Key =  21
Orginal Text :
Bpm bzmiaczm qa jczqml cvlmz bpm jqo E

--------------------------------------------------------------------------------

Key =  22
Orginal Text :
Aol aylhzbyl pz ibyplk bukly aol ipn D

--------------------------------------------------------------------------------

Key =  23
Orginal Text :
Znk zxkgyaxk oy haxokj atjkx znk hom C

--------------------------------------------------------------------------------

Key =  24
Orginal Text :
Ymj ywjfxzwj nx gzwnji zsijw ymj gnl B

--------------------------------------------------------------------------------

Key =  25
Orginal Text :
Xli xviewyvi mw fyvmih yrhiv xli fmk A

--------------------------------------------------------------------------------
```

Original Text :

The treasure is buried under the big W

[Key = 3]

e. **Rwoxavjcrxw bhbcnvb bqxdum kn lxworpdanm cx anzdran bcaxwp yjbbfxamb, rb jw ngjvyun xo j bnldarch yxurlh.**

Output :

```
S:\Ganpat University\GUNI Sem6\EH\Lab\Crypt Tool>python crypTool.py
Enter the Cipher Text That You Want to Decrypt :

Rwoxavjcrxw bhbcnvb bqxdum kn lxworpdanm cx anzdran bcaxwp yjbbfxamb, rb jw ngjvyun xo j bnldarch yxurlh.

Key =  0
Orginal Text :
Rwoxavjcrxw bhbcnvb bqxdum kn lxworpdanm cx anzdran bcaxwp yjbbfxamb, rb jw ngjvyun xo j bnldarch yxurlh.

--------------------------------------------------------------------------------------------------------

Key =  1
Orginal Text :
Qvnwzuibqwv agabmua apwctl jm kwvnqoczml bw zmycqzm abzwvo xiaaewzla, qa iv mfiuxtm wn i amkczqbg xwtqkg.

--------------------------------------------------------------------------------------------------------

Key =  2
Orginal Text :
Pumvythapvu zfzaltz zovbsk il jvumpnbylk av ylxbpyl zayvun whzzdvykz, pz hu lehtwsl vm h zljbypaf wvspjf.

--------------------------------------------------------------------------------------------------------

Key =  3
Orginal Text :
Otluxsgzout yeyzksy ynuarj hk iutlomaxkj zu xkwaoxk yzxutm vgyycuxjy, oy gt kdgsvrk ul g ykiaxoze vuroie.

--------------------------------------------------------------------------------------------------------
```

```
Key =  4
Orginal Text :
Nsktwrfynts xdxyjrx xmtzqi gj htsknlzwji yt wjvznwj xywtsl ufxxbtwix, nx fs jcfruqj tk f xjhzwnyd utqnhd.

--------------------------------------------------------------------------------------------------------

Key =  5
Orginal Text :
Mrjsvqexmsr wcwxiqw wlsyph fi gsrjmkyvih xs viuymvi wxvsrk tewwasvhw, mw er ibeqtpi sj e wigyvmxc tspmgc.

--------------------------------------------------------------------------------------------------------

Key =  6
Orginal Text :
Lqirupdwlrq vbvwhpv vkrxog eh frqiljxuhg wr uhtxluh vwurqj sdvvzrugv, lv dq hadpsoh ri d vhfxulwb srolfb.

--------------------------------------------------------------------------------------------------------

Key =  7
Orginal Text :
Kphqtocvkqp uauvgou ujqwnf dg eqphkiwtgf vq tgswktg uvtqpi rcuuyqtfu, ku cp gzcorng qh c ugewtkva rqnkea.

--------------------------------------------------------------------------------------------------------

Key =  8
Orginal Text :
Jogpsnbujpo tztufnt tipvme cf dpogjhvsfe up sfrvjsf tuspoh qbttxpset, jt bo fybnqmf pg b tfdvsjuz qpmjdz.


Key =  9
Orginal Text :
Information systems should be configured to require strong passwords, is an example of a security policy.

--------------------------------------------------------------------------------------------------------

Key =  10
Orginal Text :
Hmenqlzshnm rxrsdlr rgntkc ad bnmehftqdc sn qdpthqd rsqnmf ozrrvnqcr, hr zm dwzlokd ne z rdbtqhsx onkhbx.

--------------------------------------------------------------------------------------------------------

Key =  11
Orginal Text :
Gldmpkyrgml qwqrckq qfmsjb zc amldgespcb rm pcosgpc qrpmle nyqqumpbq, gq yl cvyknjc md y qcaspgrw nmjgaw.

--------------------------------------------------------------------------------------------------------

Key =  12
Orginal Text :
Fkclojxqflk pvpqbjp pelria yb zlkcfdroba ql obnrfob pqolkd mxpptloap, fp xk buxjmib lc x pbzrofqv mlifzv.

--------------------------------------------------------------------------------------------------------

Key =  13
Orginal Text :
Ejbkniwpekj ouopaio odkqhz xa ykjbecqnaz pk namqena opnkjc lwoosknzo, eo wj atwilha kb w oayqnepu lkheyu.

--------------------------------------------------------------------------------------------------------
```

```
Key =  14
Orginal Text :
Diajmhvodji ntnozhn ncjpgy wz xjiadbpmzy oj mzlpdmz nomjib kvnnrjmyn, dn vi zsvhkgz ja v nzxpmdot kjgdxt.

--------------------------------------------------------------------------------------------------------

Key =  15
Orginal Text :
Chzilguncih msmnygm mbiofx vy wihzcaolyx ni lykocly mnliha jummqilxm, cm uh yrugjfy iz u mywolcns jifcws.

--------------------------------------------------------------------------------------------------------

Key =  16
Orginal Text :
Bgyhkftmbhg lrlmxfl lahnew ux vhgybznkxw mh kxjnbkx lmkhgz itllphkwl, bl tg xqtfiex hy t lxvnkbmr ihebvr.

--------------------------------------------------------------------------------------------------------

Key =  17
Orginal Text :
Afxgjeslagf kqklwek kzgmdv tw ugfxaymjwv lg jwimajw kljgfy hskkogjvk, ak sf wpsehdw gx s kwumjalq hgdauq.

--------------------------------------------------------------------------------------------------------

Key =  18
Orginal Text :
Zewfidrkzfe jpjkvdj jyflcu sv tfewzxlivu kf ivhlziv jkifex grjjnfiuj, zj re vordgcv fw r jvtlizkp gfcztp.

--------------------------------------------------------------------------------------------------------

Key =  19
Orginal Text :
Ydvehcqjyed ioijuci ixekbt ru sedvywkhut je hugkyhu ijhedw fqiimehti, yi qd unqcfbu ev q iuskhyjo febyso.

--------------------------------------------------------------------------------------------------------

Key =  20
Orginal Text :
Xcudgbpixdc hnhitbh hwdjas qt rdcuxvjgts id gtfjxgt higdcv ephhldgsh, xh pc tmpbeat du p htrjgxin edaxrn.

--------------------------------------------------------------------------------------------------------

Key =  21
Orginal Text :
Wbtcfaohwcb gmghsag gvcizr ps qcbtwuifsr hc fseiwfs ghfcbu doggkcfrg, wg ob sloadzs ct o gsqifwhm dczwqm.

--------------------------------------------------------------------------------------------------------

Key =  22
Orginal Text :
Vasbezngvba flfgrzf fubhyq or pbasvtherq gb erdhver fgebat cnffjbeqf, vf na rknzcyr bs n frphevgl cbyvpl.

--------------------------------------------------------------------------------------------------------

Key =  23
Orginal Text :
Uzradymfuaz ekefqye etagxp nq oazrusgdqp fa dqcgudq efdazs bmeeiadpe, ue mz qjmybxq ar m eqogdufk baxuok.


Key =  24
Orginal Text :
Tyqzcxletzy djdepxd dszfwo mp nzyqtrfcpo ez cpbftcp deczyr alddhzcod, td ly pilxawp zq l dpnfctej azwtnj.

--------------------------------------------------------------------------------------------------------

Key =  25
Orginal Text :
Sxpybwkdsyx cicdowc cryevn lo myxpsqebon dy boaesbo cdbyxq zkccgybnc, sc kx ohkwzvo yp k comebsdi zyvsmi.

--------------------------------------------------------------------------------------------------------
```

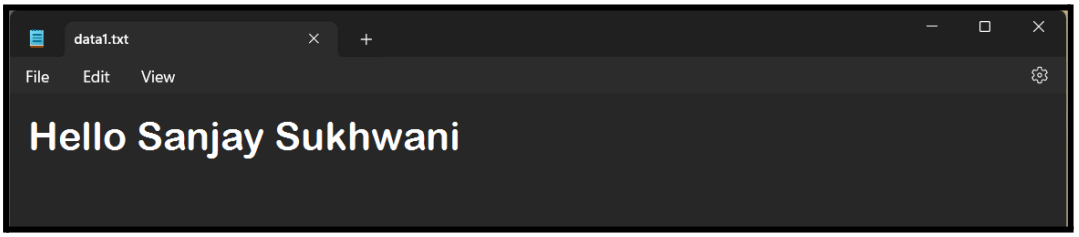
Original Text :

Information systems should be configured to require strong passwords, is an example of a security policy.

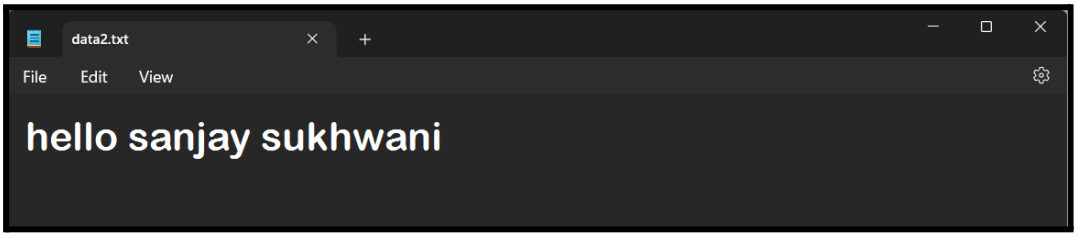
[Key = 9]

2. **Calculate MD5 using HashCalc Tool. (Note: Compare the MD5 hash of two files with minor differences in the content of file)**

File 1 [data1.txt] :



File 2 [data2.txt] :



Hash Calculation of File 1 :

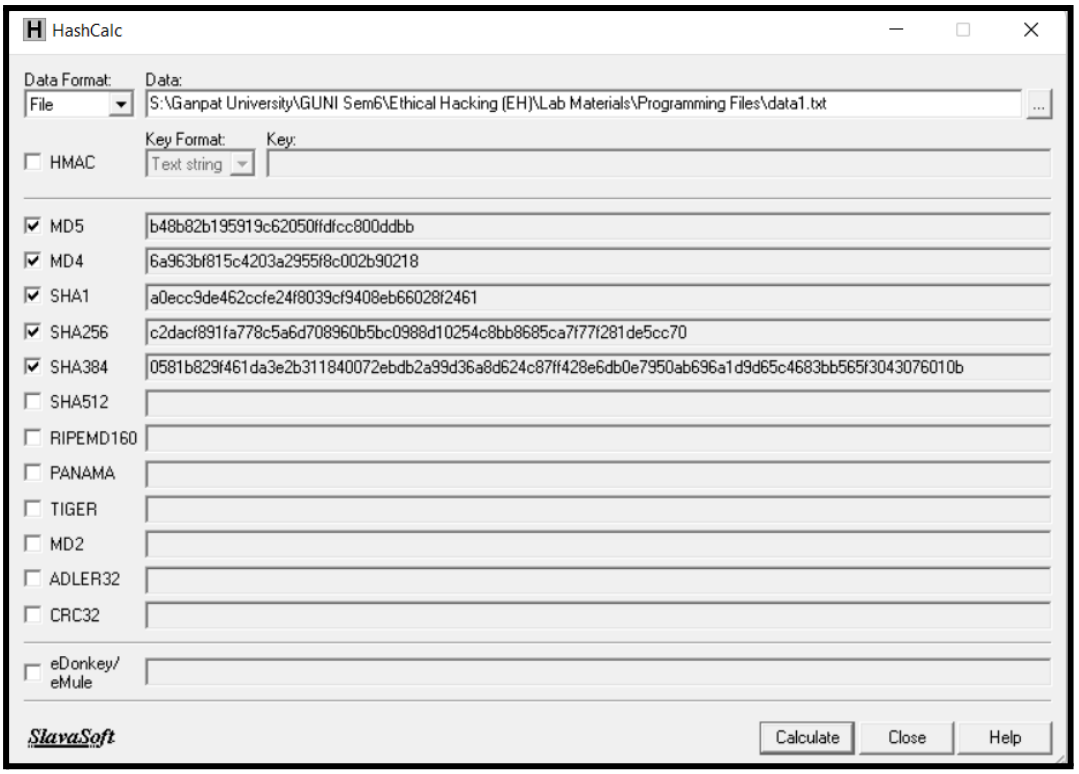
MD5 :
b48b82b195919c62050ffdfcc800ddbb

MD4 :
6a963bf815c4203a2955f8c002b90218

SHA1 :
a0ecc9de462ccfe24f8039cf9408eb66028f2461

SHA256 :
c2dacf891fa778c5a6d708960b5bc0988d10254c8bb8685ca7f77f281de5cc70

SHA238 :
0581b829f461da3e2b311840072ebdb2a99d36a8d624c87ff428e6db0e7950ab696a1d9d65c4683bb565f3043076010b



Hash Calculation of File 2 :

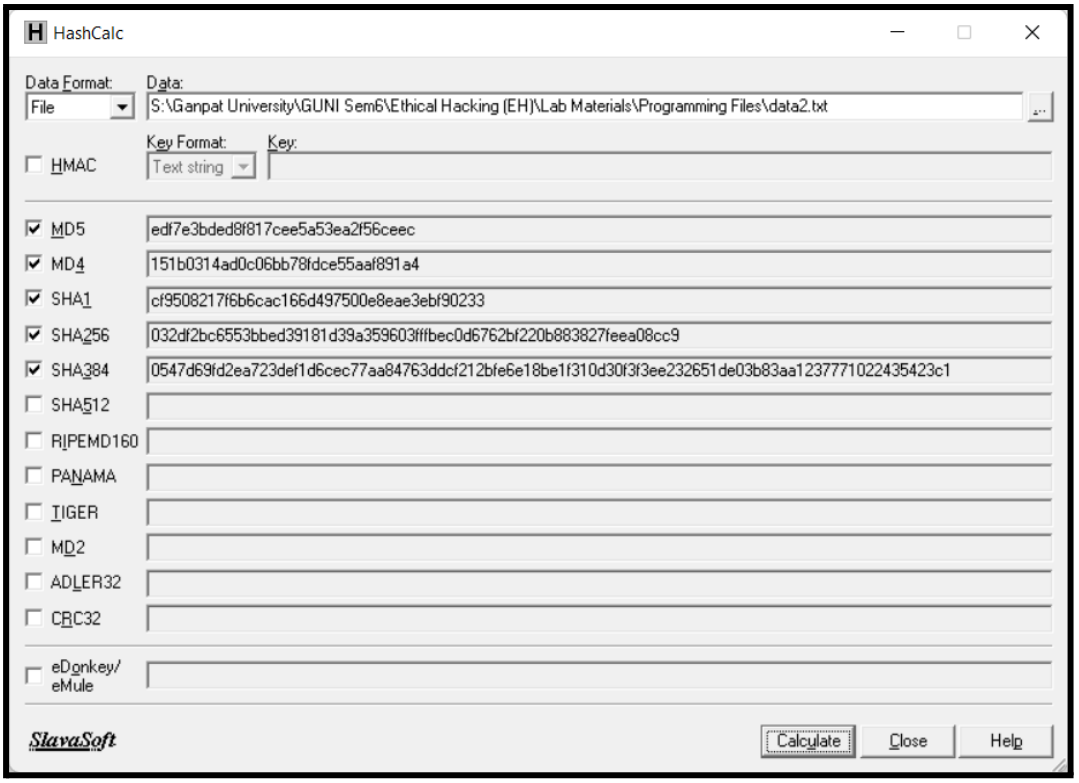
MD5 :
edf7e3bded8f817cee5a53ea2f56ceec

MD4 :
151b0314ad0c06bb78fdce55aaf891a4

SHA1 :
cf9508217f6b6cac166d497500e8eae3ebf90233

SHA256 :
032df2bc6553bbed39181d39a359603fffbec0d6762bf220b883827feea08cc9

SHA238 :
0547d69fd2ea723def1d6cec77aa84763ddcf212bfe6e18be1f310d30f3f3ee232651de0
3b83aa1237771022435423c1



MD5 of Both Files :

File 1 : b48b82b195919c62050ffdfcc800ddbb
File 2 : edf7e3bded8f817cee5a53ea2f56ceec

Both are Different, inspite of only having change in the case of letters i.e, Upper Case and Lower Case