National University of Computer and Emerging Sciences



Lab 12

COAL

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| Name | Muhammad Zain |
| Roll No. | 19F-0228 |
| LAB INSTRUCTOR | Mr. Abuzar Ghafari |
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Encryption / Decryption

# **Source Code:**

*;Author : Muhammad Zain*

;Program: Encryption Decryption

;Lab 12

INCLUDE Irvine32.inc

.data

InputMsg BYTE "ENTER PLAIN TEXT :: ",0

EncryptedMsg BYTE "ENCRYPTED TEXT :: ",0

DecryptedMsg BYTE "DECRYPTED TEXT :: ",0

input BYTE 25 DUP(0)

sizee DWORD ?

KEY BYTE 'A', 'B', 'X', 'm', '@'

range =255

.code

main PROC

call InputTheString

call plainTextEncryption

call Encryption\_Display

call plainTextEncryption

call Decryption\_Display

exit

main ENDP

;==============================

InputTheString PROC

;Recieves : Nothing

;Return : Text from User

mov eax, white + (lightred \* 16)

call SetTextColor

mov edx,OFFSET InputMsg

call WriteString

mov ecx,range

mov edx,OFFSET input

call ReadString

mov sizee,eax

ret

InputTheString ENDP

;==============================

Decryption\_Display PROC

mov edx,OFFSET DecryptedMsg

call WriteString

mov edx,OFFSET input

call WriteString

call Crlf

ret

Decryption\_Display ENDP

;==============================

Encryption\_Display PROC

mov edx,OFFSET EncryptedMsg

call WriteString

mov edx,OFFSET input

call WriteString

call Crlf

ret

Encryption\_Display ENDP

plainTextEncryption PROC

pushad

mov ecx,sizee

mov esi,0

mov edi,0

L1:

mov al, KEY[edi]

xor input[esi], al

inc esi

inc edi

cmp edi, 6

jne cont

mov edi, 0

cont:

loop L1

popad

ret

plainTextEncryption ENDP

END main

# **Snip**

Text

Description automatically generated