



TEAM 7

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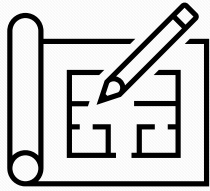
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CPL Project



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ABSTRACT

A program was made to
encrypt and decrypt strings
with a specific key(pattern)

FUNCTIONS

After initializing the libraries, 3 functions have been made.

- I. Menu(void)function, its responsible for showing the user the main menu used in the program. Users have 3 options to choose from. First, to encrypt second, to decrypt last, to exit.

```
1 //preprocessing part.
2 #include <stdio.h>
3 #include <stdlib.h>
4 //menu function
5 int menu(void)
6 {
7     int x;
8     printf("\tSelect one of the following:\n");
9     printf("1 = Enter The Encrypted messsge.\n");
10    printf("2 = Enter The Decrypted messsge\n");
11    printf("3 = Exit\n");
12    scanf("%d", &x);
13    return x;
```

- II. Encrypt(void)function, responsible for encrypting the strings entered by the user based on the key(a specific pattern)

```
15 //Encrypt function
16 void encrypt(void)
17 {
18     int i,key;
19     char s1[100];
20     printf("\nPlease Enter a messege: ");
21     scanf("%s",&s1);
22     printf("Enter key : ");
23     scanf("%d",&key);
24     for(i = 0; (i < 100 && s1[i] != '\0'); i++)
25         s1[i] = s1[i] + key;
26     printf("\nEncrypted messege: %s\n", s1);
27 }
```

FUNCTIONS &MAIN

- III. Decrypt(void)function, it's the total opposite from the previous one based on the same key(pattern)but in reverse.

Then we have main(), the program will start from here and apply statements line by line.

Initializing c as an integer variable and make its value equal to menu()function, then start while loop will continue forever except when user enter number 3 the loop will end and the whole program as well.

```
28      //Decrypt function
29 void decrypt(void)
30 {
31     int i,key;
32     char s2[100];
33     printf("\nPlease Enter a messege: ");
34     scanf("%s",&s2);
35     printf("Enter key : ");
36     scanf("%d",&key);
37     for(i = 0; (i < 100 && s2[i] != '\0'); i++)
38         s2[i] = s2[i] - key;
39     printf("\nDecrypted messege: %s\n", s2);
40 }
```

```
42 int main()
43 {
44     //main loop
45     int c;
46     c = menu();
47     while (c != 3) {
48         if (c == 1) {
49             encrypt();
50         }
51         else if (c == 2) {
52             decrypt();
53         }
54         c = menu();
55     }
56     system("pause");
57     return 0;
58 }
59 }
```