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TEAM *****



CPL Project

****ENCRYPTION AND DECODING PROGRAM FOR WORDS****



This is a program written in “C” language to encrypt and decrypt string input from the user

In this program we encrypt the given string by subtracting the hex value from each character of the password.

In the following, we review the steps:-

1-

```
#include <stdio.h>|
#include <string.h>
#include <stdbool.h>
```

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The libraries used in this code to identify the required orders



```
// encrypted function
void encrypt(char password[],int key)
{
    unsigned int i;
    for(i=0;i<strlen(password);++i)
    {
        password[i] = password[i] - key;
    }
}
```

2- Define the function of the encryption process.



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```
// decrypted function
void decrypt(char password[],int key)
{
    unsigned int i;
    for(i=0;i<strlen(password);++i)
    {
        password[i] = password[i] + key;
    }
}
```

3- Define the function of the decryption process.

```
// starting the program
int main(){
    while(1)
    {
        //bool working = true;
        // making the program running forever
        do{
            int program = 0;
            char password[100] ;
        }
    }
}
```

4-starting the program , Create a continuous iteration of the code when it is a value of working = true.

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```
// taking the sentence / word from the user
printf("Enter the password: \n ");
scanf("%s",&password);
int operation;
printf("exit :0 \n encrypted :1 \n dycrepted :2 \n");
scanf("%d",&operation);

//when the user chooses the operation we have 4 Scenari
// 1st is to be encrypted
if (operation==1){
    printf("Password          = %s\n",password);
    encrypt(password,0xFACA);
    printf("Encrypted value = %s\n",password);
}
//2nd is to be dycrepted
else if (operation==2){
    printf("Password          = %s\n",password);
    decrypt(password,0xFACA);
    printf("Decrypted value = %s\n",password);
}
//3rd is to exit the program
else if (operation==0)
{
    printf("Quitting the program...\n\n");
    return 0 ;
}
```

5- Then take the words from the user Create a menu that gives the user several choices, It chooses

0 if it wants to exit the program.

1 if he wants to encrypt.

2 if he wants to decode.

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```
}  
// 4th is to enter invalid num  
else  
{  
    printf("invalid!");  
}  
}  
while (1);  
return 0;  
}}
```

6- Then the program repeats the previous steps until the exit from the program.

Encryption is the process, which turns ordinary text into cipher text using the key. Decryption is the reverse process.



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```
password      = ahmedhatem_radwag1a1
Encrypted value = ù?????ù?????ù??ù??ù?
Enter the password:
team9_hossam_shahd_ahmed
exit :0
encrypted :1
dycrepted :2
2
Password      = team9_hossam_shahd_ahmed
Decrypted value = >/+7♥)29==+7)=2+2.)+27/.
Enter the password:
team9_hossam_shahd_ahmed
exit :0
encrypted :1
dycrepted :2
1
Password      = team9_hossam_shahd_ahmed
Encrypted value = ??ù?o?????ù?????ù???ù????
Enter the password:
0
exit :0
encrypted :1
dycrepted :2
0
Quitting the program...

-----
Process exited after 58.1 seconds with return value 0
Press any key to continue . . .
```

```
Press any key to continue . . .
Process exited after 28.1 seconds with return value 0
-----
```

```
Quitting the program...
```