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**Exp10:** Implementation of simple Encryption and Decryption in C

## **Program: Encryption.c**

```
#include <stdio.h>
```

```
void encrypt(char str[], char encrypted[]) {  
    int i = 0;  
    while (str[i] != '\0') {  
        if ((str[i] >= 'A' && str[i] <= 'Z') || (str[i] >= 'a' && str[i] <= 'z'))  
            encrypted[i] = str[i] + 3;  
        else  
            encrypted[i] = str[i];  
        i++;  
    }  
    encrypted[i] = '\0';  
}
```

```
void decrypt(char str[], char decrypted[]) {  
    int i = 0;  
    while (str[i] != '\0') {  
        if ((str[i] >= 'A' && str[i] <= 'Z') || (str[i] >= 'a' && str[i] <= 'z'))  
            decrypted[i] = str[i] - 3;  
        else  
            decrypted[i] = str[i];  
        i++;  
    }  
    decrypted[i] = '\0';  
}
```

```

}

int main() {
    char input[100], encrypted[100], decrypted[100];
    int i = 0;

    printf("Enter a string: ");
    while ((input[i] = getchar()) != '\n' && i < 99) {
        i++;
    }
    input[i] = '\0';

    printf("Original String: %s \n", input);

    encrypt(input, encrypted);
    printf("Encrypted String: %s \n", encrypted);

    decrypt(encrypted, decrypted);
    printf("Decrypted String: %s \n", decrypted);

    return 0;
}

```

## Output :

PS C:\VS Code\C Language> gcc Encryption.c

PS C:\VS Code\C Language> ./a

Enter a string: Shivraj Vijay More

Original String: Shivraj Vijay More

Encrypted String: Vklyudm Ylmd| Pruh

Decrypted String: Shivraj Vija| More

PS C:\VS Code\C Language> ./a

Enter a string: Good morning everyone !

Original String: Good morning everyone !

Encrypted String: Jrrg pruqlqj hyhu|rqh !

Decrypted String: Good morning ever|one !