



Subject :

Software :

Hardware :

Branch :

Semester :

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Prog No. 6

PROBLEM STATEMENT

Implement data encryption and data decryption.

ALGORITHM & CODE :

Code :

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

void encrypt (char *text, int shift) {
    for (int i=0; text[i] != '\0'; i++) {
        char ch = text[i];
        if (ch >= 'A' && ch <= 'Z') {
            text[i] = ((ch - 'A' + shift) % 26) + 'A';
        }
        else if (ch >= 'a' && ch <= 'z') {
            text[i] = ((ch - 'a' + shift) % 26) + 'a';
        }
    }
}

void decrypt (char *text, int shift) {
    for (int i=0; text[i] != '\0'; i++) {
        char ch = text[i];
        if (ch >= 'A' && ch <= 'Z') {
            text[i] = ((ch - 'A' - shift + 26) % 26) + 'A';
        }
        else if (ch >= 'a' && ch <= 'z') {
            text[i] = ((ch - 'a' - shift + 26) % 26) + 'a';
        }
    }
}
```

INPUT GIVEN

OUTPUT OBTAINED

REMARKS

GRADE :

Signature of Faculty

Date :

Signature of Student

Date :



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PROBLEM STATEMENT

ALGORITHM & CODE :

```
int main() {
    char text[100];
    int shift;
    printf("Enter text to encrypt:");
    fgets(text, sizeof(text), stdin);
    text[strlen(text)] = '\0';
    printf("Enter shift value:");
    scanf("%d", &shift);
    encrypt(text, shift);
    printf("Encrypted text: %s\n", text);
    decrypt(text, shift);
    printf("Decrypted text: %s\n", text);
    return 0;
}
```

O/P

Enter text to encrypt: Hello World

Enter shift value: 3

Encrypted text: Khore Zruog

Decrypted text: Hello World.

INPUT GIVEN

OUTPUT OBTAINED

REMARKS

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