

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

```
#include <ctype.h>
```

```
int main() {
```

```
    char text[100];
```

```
    int i, key = 3;
```

```
    printf("Enter text: ");
```

```
    fgets(text, sizeof(text), stdin);
```

```
    /* Encryption */
```

```
    for (i = 0; text[i] != '\0'; i++) {
```

```
        if (isupper(text[i]))
```

```
            text[i] = (text[i] - 'A' + key) % 26 + 'A';
```

```
        else if (islower(text[i]))
```

```
            text[i] = (text[i] - 'a' + key) % 26 + 'a';
```

```
    }
```

```
    printf("Encrypted text: %s", text);
```

```
    /* Decryption */
```

```
    for (i = 0; text[i] != '\0'; i++) {
```

```
        if (isupper(text[i]))
```

```
            text[i] = (text[i] - 'A' - key + 26) % 26 + 'A';
```

```
        else if (islower(text[i]))
```

```
            text[i] = (text[i] - 'a' - key + 26) % 26 + 'a';
```

```
}
```

```
printf("Decrypted text: %s", text);
```

```
return 0;
```

```
}
```

Enter text: hello

Encrypted text: khood

Decrypted text: hello

=== Code Execution Successful ===