```
#include <stdio.h>
#include <string.h>
int main() {
    char message[100], result[100];
    char key[26] = "QWERTYUIOPASDFGHJKLZXCVBNM"; // Substitution key
    int choice;
    printf("1. Encrypt\n2. Decrypt\nChoice: ");
    scanf("%d", &choice);
    getchar(); // clear input buffer
    printf("Enter message (UPPERCASE only): ");
    fgets(message, sizeof(message), stdin);
    for (int i = 0; message[i] != '\0'; i++) {
        char ch = message[i];
        if (ch >= 'A' && ch <= 'Z') {
            if (choice == 1) {
                result[i] = key[ch - 'A']; // Encrypt
            } else if (choice == 2) {
                // Find index of letter in key
                for (int j = 0; j < 26; j++) {
                    if (key[j] == ch) {
                        result[i] = 'A' + j; // Decrypt
                        break;
                    }
                }
            }
        } else {
            result[i] = ch; // Keep spaces and punctuation unchanged
        }
    }
    result[strlen(message)] = '\0'; // End string
    if (choice == 1)
```

```
    printf("Encrypted: %s\n", result);
  else if (choice == 2)
    printf("Decrypted: %s\n", result);
  else
    printf("Invalid choice.\n");
  return 0;
}
```

Output

```
1. Encrypt
2. Decrypt
Choice: 1
Enter message (UPPERCASE only): SUMANTH
Encrypted: LXDQFZI


=== Code Execution Successful ===
```