```c
#include <stdio.h>

// Function prototypes
void encrypt(char input[], int shift);
void decrypt(char input[], int shift);
void login();


int main() {
    char input[200];
    int choice, shift;

    login();

    while (1) {
        printf("1- Encrypt\n2- Decrypt\n3- Terminate\nEnter choice: ");
        scanf("%d", &choice);

        switch (choice) {
            case 1:
                printf("Enter message: ");
                scanf(" %[^\n]", input);  // Read the whole line,
                including spaces
                printf("Enter shift value: ");
                scanf("%d", &shift);
                encrypt(input, shift);
                break;
            case 2:
                printf("Enter message: ");
                scanf(" %[^\n]", input);  // Read the whole line,
                including spaces
                printf("Enter shift value: ");
                scanf("%d", &shift);
                decrypt(input, shift);
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33                break;
34            case 3:
35                return 0;
36            default:
37                printf("Invalid output\n");
38                break;
39          }
40       }
41  }
42
43  void login()
44  {
45      //username and password can be changed by first changing
          the no of each character(ie m for password and n for
          username) and changing the letters in the password and
          username 1D array.
46      int m = 4;
47      int n = 4;
48      char password[4] = {'p','a','s','s'};
49      char username[4] = {'u','s','e','r'};
50      char user[n];
51      char pass[m];
52      int c, i;
53      do {
54          printf("Enter username:");
55          for (i = 0; i < n; i++)
56              scanf(" %c", &user[i]);
57          printf("\nEnter password:");
58          for (i = 0; i < m; i++)
59              scanf(" %c", &pass[i]);
60          c = 1;
61          for (i = 0; i < m; i++)
62           {
63              if (password[i] != pass[i]) {
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64                  c = 0;
65                  break;
66              }
67          }
68      } while (c != 1);
69      printf("Login successfull\n");
70      printf("\nWelcome ");
71      for (i=0;i<n;i++)
72      {
73          printf("%c",user[i]);
74      }
75      printf("\n");
76  }



80  void decrypt(char input[], int shift)
81  {
82      int i = 0;
83
84      while (input[i] != '\0')
85      {
86          if (input[i] >= 'a' && input[i] <= 'z')
87          {
88              input[i] = 'a' + (input[i] - 'a' + (26 - shift)) % 26;
89          }
90          else if (input[i] >= 'A' && input[i] <= 'Z')
91          {
92              input[i] = 'A' + (input[i] - 'A' + (26 - shift)) % 26;
93          }
94          else if (input[i] >= '1' && input[i] <= '9')
95          {
96              input[i] = '1' + (input[i] - '1' + (10 - shift)) % 10;
97          }
```

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 98            i++;
 99        }
100
101        printf("Decrypted message: %s\n", input);
102   }
103
104   void encrypt(char input[], int shift)
105   {
106        int i = 0;
107
108        while (input[i] != '\0')
109        {
110            if (input[i] >= 'a' && input[i] <= 'z')
111            {
112                input[i] = 'a' + (input[i] - 'a' + shift) % 26;
113            }
114            else if(input[i] >= 'A' && input[i] <= 'Z')
115            {
116                input[i] = 'A' + (input[i] - 'A' + shift) % 26;
117            }
118            else if(input[i] >= '0' && input[i] <= '9')
119            {
120                input[i] = '0' + (input[i] - '0' + shift) % 10;
121            }
122            i++;
123        }
124
125        printf("Encrypted message: %s\n", input);
126   }
```