

Abit

Page 2  
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Ans

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#include <stdio.h>
#include <conio.h>
#include <string.h>
#include <ctype.h>
#define Mx 5
int choice;
void playfair(char ch1, char ch2, char key [Mx]
[Mx]) {
    int i, j, w, x, y, z;
    for (i = 0; i < Mx; i++) {
        for (j = 0; j < Mx; j++) {
            if (ch1 == key[i][j]) {
                w = i;
                x = j;
            } else if (ch2 == key[i][j]) {
                y = i;
                z = j;
            }
        }
    }
    // printf("%d %d %d %d", w, x, y, z);
    if (w == y) {
        if (choice == 1) {
            x = (x + 1) % 5;
            z = (z + 1) % 5;
        }
    }
}
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else {
    x = ((x - 1) % s + s) % s;
    z = ((z - 1) % s + s) % s;
}

printf ("%c%c", key[w][x], key[y][z]);

} else if (x == z) {
    if (choice == 1) {
        w = (w + 1) % s;
        y = (y + 1) % s;
    }

    else {
        w = ((w - 1) % s + s) % s;
        y = ((y - 1) % s + s) % s;
    }

    printf ("%c%c", key[w][x], key[y][z]);
}

else {
    printf ("%c%c", key[w][z], key[y][x]);
}

void main () {
    int i, j, k = 0, l, m = 0, n;
    char key [mx] [mx], key_minus [zs],
    key_six [10], su [zs] = { 0 };
}

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char alpha [ 26 ] = {
    'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J',
    'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T',
    'U', 'V', 'W', 'X', 'Y', 'Z' ;
};

printf ("1 n1 . Encryption & n2 . Decryption \n")
n Choice (1 or 2); //,
scanf (" %d ", &choice );
if ( choice != 1 && choice != 2 ) { printf
(" Invalid choice " ); return ; }
fflush ( stdout );
printf (" Enter Key : ");
gets ( KeyStr );
printf (" Enter the text : ");
gets ( Str );
removeDuplicates ( KeyStr );
n = strlen ( KeyStr );
for ( i = 0; i < n; i++ ) {
    if ( KeyStr [ i ] == '-' ) KeyStr [ i ] = 'i';
    else if ( KeyStr [ i ] == 'J' ) KeyStr [ i ]
        = 'I';
    KeyStr [ i ] = toupper ( KeyStr [ i ] );
}
for ( i = 0; i < strlen ( Str ); i++ ) {

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Page 4 Ab2

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if (stu[i] == 'j') stu[i] = 'i';
else if (stu[i] == 'T') stu[i] = 'I';
stu[Ei] = map[stu[i]];
}

j=0;
for (i=0; i<26; i++) {
    for (K=0; K<n; K++) {
        if (Key stu[K] == alpha[i]) break;
        else if (alpha[i] == 'T') break;
    }
    if (K==n) {
        Key minus[i] = alpha[i];
        i++;
    }
}
K=0;
for (i=0; i<Mx; i++) {
    for (j=0; j<Nx; j++) {
        if (K<n) {
            Key[i][j] = Key stu[K];
            K++;
        }
        else {
            Key[i][j] = Key minus[n];
        }
        printf("%c", Key[i][j]);
    }
    printf("\n");
}
```

Page 5 Aho

```
printf ("Inverted Text: %s\nOutput Text: ", st);
for (i=0; i< strlen (st); i++) {
    if (st[i] == 'J') stu[i] = 'I';
    if (stu[i+1] == '\0') play Jam (stu[i], 'x',
        Key);
    else {
        if (stu[i+1] == 'J') stu[i+1] = 'I';
        if (stu[i] == stu[i+1]) play fall (stu
            [i], 'x', Key);
        else {
            play Jam (stu[i], stu[i+1], key);
            i++;
        }
    }
}
if (choice == 2) printf ("(Remove
unnecessary X)\n");
```