

```

1  #include <stdio.h>
2  #include <string.h>
3  int pattern_match(char[], char[]);
4
5  int main() {
6      char a[100], b[100];
7      int pos;
8
9      printf("Enter the Source String:\n");
10     gets(a);
11
12     printf("Enter the Pattern to find : \n");
13     gets(b);
14
15     pos=pattern_match(a, b);
16
17     if(pos!= -1) {
18         printf("The Pattern is found at the location: %d\n", pos+1);
19     }
20     else {
21         printf("Pattern not Found\n");
22     }
23
24     return 0;
25 }
26
27 int pattern_match(char text[], char pattern[]) {
28     int i,j,k, text_length, pattern_length, pos= -1;
29
30     text_length  = strlen(text);
31     pattern_length = strlen(pattern);
32
33     if (pattern_length > text_length) {
34         return -1;
35     }
36
37     for (i=0; i<=text_length-pattern_length;i++) {
38         pos=k=i;

```

```

19 }
20 else {
21     printf("Pattern not Found\n");
22 }
23
24 return 0;
25 }
26
27 int pattern_match(char text[], char pattern[]) {
28     int i,j,k, text_length, pattern_length, pos= -1;
29
30     text_length = strlen(text);
31     pattern_length = strlen(pattern);
32
33     if (pattern_length > text_length) {
34         return -1;
35     }
36
37     for (i=0; i<=text_length-pattern_length;i++) {
38         pos=k=i;
39
40         for (j=0;j<pattern_length;j++) {
41             if (pattern[j] == text[k]) {
42                 k++;
43             }
44             else {
45                 break;
46             }
47         }
48         if (j== pattern_length) {
49             return pos;
50         }
51     }
52
53     return -1;
54 }
55

```

C:\WINDOWS\SYSTEM32\cmd.exe

Enter the Source String:

bmscollege

Enter the Pattern to find :

co

The Pattern is found at the location: 4

(program exited with code: 0)

Press any key to continue . . .

C:\WINDOWS\SYSTEM32\cmd.exe

Enter the Source String:

bmscollege

Enter the Pattern to find :

de

Pattern not Found

(program exited with code: 0)

Press any key to continue . . .