

```

1  #include<stdio.h>
2  void main()
3  {
4      int position=0,i=0;
5      char letter,input[20];
6      printf("Enter input string \t :");
7      scanf("%s",input);
8      while((letter=input[i++])!='\0')
9      {
10         switch(position)
11         {
12             case 0: if(letter=='a')
13                     position=1;
14                     else if(letter=='b')
15                         position=3;
16                     else
17                     {
18                         printf("Invalid letter");
19                         exit(0);
20                     }
21                     break;
22
23             case 1: if(letter=='a')
24                     position=2;
25                     else if(letter=='b')
26                         position=3;
27                     else
28                     {
29                         printf("Invalid letter");
30                         exit(0);
31                     }
32                     break;
33
34             case 2: if(letter=='a')
35                     position=2;
36                     else if(letter=='b')
37                         position=3;
38                     else
39                     {
40                         printf("Invalid letter");
41                         exit(0);
42                     }
43                     break;
44
45             case 3: if(letter=='a')
46                     position=1;
47                     else if(letter=='b')
48                         position=4;
49                     else
50                     {
51                         printf("Invalid letter");
52                         exit(0);
53                     }
54                     break;
55
56             case 4: if(letter=='a')
57                     position=1;
58                     else if(letter=='b')
59                         position=4;
60                     else
61                     {
62                         printf("Invalid letter");
63                         exit(0);
64                     }
65                     break;
66
67             }
68         }
69     }
70     if(position==2 || position==4)
71         printf("\n\nString accepted\n\n");
72     else
73         printf("\n\nString not accepted\n\n");
74 }
75
76
77
78
79

```