

```

1  #include<bits/stdc++.h>
2  using namespace std;
3
4  int i=0,f=0,l;
5
6  string s;
7
8  void X(){
9
10     if(s[i]=='b'){
11         i++;
12         f = 1;
13     }
14     else{
15         f = 0;
16         return;
17     }
18
19     if(s[i]=='b'){
20         i++;
21         f = 1;
22         if(i!=l-1) X();
23     }
24     else if(s[i]=='c'){
25         i++;
26         f = 1;
27         if(i!=l-1) X();
28     }
29     else{
30         f = 0;
31         return;
32     }
33 }
34
35 void A(){
36
37     if(s[i]=='a'){
38         i++;
39         f = 1;
40     }
41     else return;
42
43     if(i!=l-1){
44         X();
45     }
46
47     if(i==l-1 && f){
48         if(s[i]=='d'){
49             f = 1;
50             i++;
51             return;
52         }
53         else{
54             f = 0;
55             return;
56         }
57     }
58 }
59
60 }
61
62 int main(){
63
64     freopen("i2.txt","r",stdin);
65     freopen("o2.txt","w",stdout);
66     while(getline(cin,s)){

```

```
67
68
69
70     f = 0;
71     i = 0;
72
73     l = s.size();
74
75     A();
76
77     if(l==i && f){
78         cout<<"valid\n";
79     }
80     else{
81         cout<<"invalid\n";
82     }
83
84 }
85
86 }
```