#include<string.h>

#include<stdio.h>

int main()

{

char s[20];

printf("Enter the String: ");

scanf("%s",s);

int state = 0, i = 0 , tocheckFlag = 1;

while(i<strlen(s)){

switch(state){

case 0:

if(s[i]=='s'){

state = 1;

break;

}

else if(s[i]=='b'){

state = 2;

break;

}

else{

state = 5;

break;

}

case 1:

if(s[i]=='s'){

state = 1;

break;

}

else if(s[i]=='b'){

state = 2;

break;

}

else{

state = 5;

break;

}

case 2:

if(s[i]=='s'){

state = 1;

break;

}

else if(s[i]=='b'){

state = 2;

break;

}

else{

state = 5;

break;

}

case 3:

if(s[i]=='s'){

state = 1;

break;

}

else if(s[i]=='b'){

state = 2;

break;

}

else{

state = 5;

break;

}

case 4:

if(s[i]!='a' && s[i]!='b'){

state = 5;

break;

}

else {

printf("String recognized");

break;

}

case 5:

i = strlen(s) + 1;

printf("String not valid\n");

break;

}

i++;

}

}