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*CHECKING WHETHER STRING BELONGS TO THE GRAMMAR*

*#include<stdio.h>*

*#include<string.h>*

*int main()*

*{*

*char s[100];*

*int i,flag,flag1,flag2;*

*int l;*

*printf("enter a string to check: ");*

*scanf("%s",s);*

*l=strlen(s);*

*flag=1;*

*for(i=0;i<l;i++)*

*{*

*if(s[i]!='0' && s[i]!='1')*

*{*

*flag=0;*

*}*

*}*

*if(flag!=1)*

*printf("string is not valid\n");*

*if(flag==1)*

*{*

*if(l%2!=0)*

*{*

*printf("the string doesnot satisfy the condition 0^n1^n\n");*

*printf("string not accepted\n");*

*}*

*else*

*{*

*flag1=1;*

*for(i=0;i<(l/2);i++)*

*{*

*if(s[i]!='0')*

*{*

*flag1=0;*

*}*

*}*

*flag2=1;*

*for(i=l/2;i<l;i++)*

*{*

*if(s[i]!='1')*

*{*

*flag2=0;*

*}*

*}*

*if(flag1==1 && flag2==1)*

*{*

*printf("the string satisfies the condition 0^n1^n\n");*

*printf("string accepted\n");*

*}*

*else*

*{*

*printf("the string does not satisfies the condition 0^n1^n\n");*

*printf("string not accepted\n");*

*}*

*}*

*}*

*}*

