#include<stdio.h> #include<string.h> char stack[20]; int top,count=0; void push()

{

top=top+1; stack[top]='0'; stack[top+1]='\0';

}

int pop()

{ if(top<1) return(0);

else

{

stack[top]='\0'; top=top-1;

return(1);

}

}

void main()

{

int m,i,j,k,l,a,len;

char input[20],rem\_input[20];

printf("Simulation of PDA for n 0's followed by 2n 1's\n");

printf("Enter a string : "); scanf("%s",input); l=strlen(input); j=0;stack[0]='Z';top=0; printf("Stack\tInput\n"); printf("%s\t%s\n",stack,input);

while(1)

{

len=strlen(input);

while(len>0)

{

if(input[0]=='0')

{ push();

m=0;

for(k=1;k<len;k++)

{

rem\_input[m]=input[k];

m=m+1;

}

rem\_input[m]='\0';

strcpy(input,rem\_input);

printf("%s\t%s\n",stack,input);

}

if(input[0]=='1')

{

count++; if(count%2==0)

{ a=pop(); if(a==0)

{

printf("String not accepted"); goto b; } else {

m=0; for(k=1;k<len;k++)

{

rem\_input[m]=input[k];

m=m+1;

}

}

rem\_input[m]='\0'; strcpy(input,rem\_input);

printf("%s\t%s\n",stack,input);

} else {

m=0; for(k=1;k<len;k++)

{

rem\_input[m]=input[k];

m=m+1;

}

rem\_input[m]='\0'; strcpy(input,rem\_input);

printf("%s\t%s\n",stack,input);

}

}

break;

}

j=j+1;

//printf("j = %d\t l = %d\n",j,l); if(j==l)

{ break;

}

}

if(top>=1)

{

printf("String not accepted");

} else

{

printf("String accepted");

} b: printf(".............");

}