#include<stdio.h>

#include<stlib.h>

struct node

{

char data;

struct node \*next;

}\*top=NULL;

void push(char x)

{

struct node \*t;

t=(struct node\*)malloc(sizeof(struct node));

if(t==NULL)

{

printf("Stack is overflow:\n");

}

else

{

t->data=x;

t->next=top;

top=t;

}

}

char pop()

{

char x=-1;

struct node \*t;

if(top=NULL)

{

printf("Stack is Empty:\n");

}

else

{

top=t;

x=t->data;

top=top->next;

free(t);

}

return x;

}

int isbalanced(char exp)

{

int i;

for(i=0;exp[i]!='\0';i++)

{

if(exp[i]=='('||exp[i]=='['||exp[i]=='{')

push(exp[i]);

else if(exp[i]==')'|| exp[i]=='}'|| exp[i]==']')

{

if(top==NULL)

{

return 0;

}

char x=top->data;

if(x==')'&& exp[i]==')'|| x=='('&& exp[i]=='}' ||x=='['&& exp[i]==']')

{

pop();

}

}

}

}

int main()

{

char \*exp="[(a+b)+{c-d}]";

}