Parenthesis Matching

```c
#include <stdio.h>
#include <stdlib.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 full\n");
    else
    {
        t->data=x;
        t->next=top;
        top=t;
    }

}

char pop()
{
    struct Node *t;
    char x=-1;

    if(top==NULL)
        printf("Stack is Empty\n");
    else
    {
        t=top;
        top=top->next;
```

```c
        x=t->data;
        free(t);
    }
    return x;
}

void Display()
{
    struct Node *p;
    p=top;
    while(p!=NULL)
    {
        printf("%d ",p->data);
        p=p->next;
    }
    printf("\n");
}

int isBalanced(char *exp)
{
    int i;

    for(i=0;exp[i]!='\0';i++)
    {
        if(exp[i]=='(')
            push(exp[i]);
        else if(exp[i]==')')
        {
            if(top==NULL)
                return 0;
            pop();
        }
    }
    if(top==NULL)
        return 1;
    else
        return 0;
}
```

```c
int main()
{
    char *exp="((a+b)*(c-d)))";

    printf("%d ",isBalanced(exp));

    return 0;
}
```