

Program to convert infix expression to postfix expression

```
#include<stdio.h>
```

```
#include<ctype.h>
```

```
char stack[100];
```

```
int top = -1;
```

```
void push(char x)
```

```
{  
    stack[++top] = x;  
}
```

```
char pop()
```

```
{  
    if(top == -1)  
        return -1;  
    else  
        return stack[top--];  
}
```

```
int priority(char x)
```

```
{  
    if(x == '(')  
        return 0;  
    if(x == '+' || x == '-')  
        return 1;
```

```
    if(x == '*' || x == '/')  
        return 2;  
    return 0;  
}
```

```
int main()  
{  
    char exp[100];  
    char *e, x;  
    printf("Enter the expression : ");  
    scanf("%s", exp);  
    printf("\n");  
    e = exp;  
  
    while(*e != '\0')  
    {  
        if(isalnum(*e))  
            printf("%c", *e);  
        else if(*e == '(')  
            push(*e);  
        else if(*e == ')')  
        {  
            while((x = pop()) != '(')  
                printf("%c", x);  
        }  
    }
```

```
else
{
    while(priority(stack[top]) >= priority(*e))
        printf("%c",pop());
    push(*e);
}
e++;
}

while(top != -1)
{
    printf("%c",pop());
}return 0;
}
```

Status Successfully executed **Date** 2021-03-25 10:58:19 **Time** 0 sec **Mem** 15.232 kB



Input

$(a+b)*c$

Output

Enter the expression :
 $a\ b + c\ *$