

## Infix to Postfix Conversion in C

```
#include<stdio.h>
char stack[20];
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;
}

main()
{
    char exp[20];
    char *e, x;
    printf("Enter the expression :: ");
    scanf("%s",exp);
    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());
}
}

```

## OUTPUT:

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

Enter the expression :: (a+b)\*c+(d-a)  
ab+c\*da-+