

```

//infix to postfix
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <ctype.h>
#define max 100
char s[max];
int top=-1;
void push(char value)
{

    s[++top]=value;

}
char pop()
{
    char value=' ';
    if (top== -1)
        return value;
    else
        return s[top--];
}
int pre(char value)
{
    if(value=='^')
    {
        return 3;
    }
    else if(value == '*' || value == '/')
    {

```

```

        return 2;
    }
    else if(value == '+' || value == '-')
    {
        return 1;
    }
    else
    {
        return 0;
    }
}

void convert(char infix[],char postfix[])
{
    int i=0,j=0;
    char x;
    while(infix[i]!='\0')
    {
        if(infix[i]=='(')
        {
            push(infix[i]);
            i++;
        }
        else if(infix[i]==')')
        {
            while((s[top]!='(') && (top!=-1))
            {
                postfix[j++]=pop();
            }
            x=pop();

```

```

        i++;
    }
    else if(isalnum(infix[i]))
    {
        postfix[j++]=infix[i];
        i++;

    }
    else
    {
        while((s[top]!='(') && (top!=-1) && (pre(s[top])>=pre(infix[i])))
        {
            postfix[j++]=pop();

        }
        push(infix[i]);
        i++;
    }
}

while((s[top]!='(') && (top!=-1))
{
    postfix[j++]=pop();
}
postfix[j]='\0';
}

void main()
{
    char infix[100],postfix[100];
    printf("enter the exp:");

```

```
scanf("%s",infix);  
convert(infix,postfix);  
printf("postfix:");  
printf("%s",postfix);  
}
```

Output

```
enter the exp:((a+b)*c-d)  
postfix:ab+c*d-
```