

```
#include <stdio.h>
#include <ctype.h>
#define SIZE50
char stack[SIZE];
int top = -1;

push(char elem)
{
    stack[++top] = elem;
}

char pop()
{
    return (stack[top--]);
}

int pr(char symbol)
{
    if (symbol == '^')
    {
        return (3);
    }
    else if (symbol == '*' || symbol == '/')
    {
        return (2);
    }
    else if (symbol == '+' || symbol == '-')
    {
        return (1);
    }
    else
    {
        return (0);
    }
}
```

```

void main()
{
    Char infix[50], postfix[50], ch, elem;
    int i=0, k=0;
    Printf("enter infix expression");
    scanf("%s", infix);
    Push('#');
    while ((ch=infix[i++])!='\0')
    {
        if (ch=='(') Push(ch);
        else
        if (isalnum(ch)) postfix[k++]=ch;
        else
        if (ch==')')
        {
            while (stack[top]!='(')
            {
                postfix[k++]=pop();
                elem=pop();
            }
            else
            {
                while (pr(stack[top])>=pr(ch))
                {
                    postfix[k++]=pop();
                }
                Push(ch);
            }
        }
    }
    while (stack[top]!='#')
    {
        postfix[k++]=pop();
    }
    postfix[k]='\0';
}

```

```
printf("\n postfix expression = %s\n", postfix);
```

```
}
```