

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

```
#define SIZE 50
```

```
char stack[SIZE];  
int top=-1;
```

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

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

```
char peek()  
{  
    char x;  
    x=stack[top];  
    return(x) ;
```

```
}
```

```
int pr(char elem)
```

```
{
```

```
    switch(elem)
```

```
    {
```

```
        case '#': return 0;
```

```
        case '(': return 1;
```

```
        case '+':
```

```
        case '-': return 2;
```

```
        case '*':
```

```
        case '/': return 3;
```

```
    }
```

```
}
```

```
void main()
```

```
{
```

```
    char infx[50],pofx[50],ch,elem;
```

```
    int i=0,k=0;
```

```
    clrscr();
```

```
    printf("\n\nRead the Infix Expression ? ");
```

```
    scanf("%s",infx);
```

```
    push('#');
```

```
    while( (ch=infx[i++]) != '\0')
```

```
    {
```

```
        if( ch == '(') push(ch);
```

```
        else
```

```
            if(isalnum(ch)) pofx[k++]=ch;
```

```

else
if( ch == ')')
{
    while( peek() != '(' )
    pofx[k++]=pop();
    elem=pop();
}
else
{
    while( pr(peek()) >= pr(ch) )
    pofx[k++]=pop();
    push(ch);
}
}

while( peek() != '#')
    pofx[k++]=pop();

pofx[k]='\0';
printf("\n\nGiven Infix Expn: %s Postfix Expn:
%s\n",infx,pofx);
getch();
}

```