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#include<stdio.h>
#include<ctype.h>
#include<string.h>
#define MAX 100
char stack[MAX];
int top = -1;
void push(char c)
{
    if(top== MAX-1)
    {
        printf("stack is full");
    }
    else
{
    top=top+1;
    stack[top]= c;
}
}
char pop()
{
    char val;
    if(top== -1)
    {
        printf("stack is empty");
        return -1;
    }
    else
{
    val=stack[top];
    top=top-1;
}
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    return val;
}

}

char peek()

{
    if(top== -1)
        return '\0';
    return stack[top];
}

int precedence(char c)

{
    if (c =='+' || c ==' -') return 1;
    if (c =='*' || c =='/') return 2;
    return 0;
}

void infixtopostfix(char infix[],char postfix[])
{
    int i,k=0;
    char c;

    for(i=0; infix[i] !='\0'; i++)
    {
        c=infix[i];

        if (isalnum(c))
        {
            postfix[k]=c;
            k=k+1;
        }
        else if (c == '(')
        {
            push(c);

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    }

else if (c == ')')
{
    while(top != -1 && peek() != '(')
    {
        postfix[k] = pop();
        k=k+1;
    }
    pop();
}

else
{
    while(top != -1 && precedence(peek()) >= precedence(c))
    {
        postfix[k]=pop();
        k=k+1;
    }
    push(c);
}

}

while(top != -1)
{
    postfix[k] = pop();
    k=k+1;
}

}

postfix[k]='\0';
}

int main()
{
    char infix[MAX], postfix[MAX];
    printf("enter the parenthesized expression");
}

```

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

infixtopostfix(infix, postfix);

printf("the converted infix expression is %s \n", postfix);

return 0 ;

}
```

The screenshot shows a terminal window with a black background and white text. At the top, it displays the command line prompt and the path: "C:\Users\NETRA TM\OneDrive". Below the prompt, the program's output is shown, including the input expression, the converted postfix expression, and the process statistics. The terminal window has standard window controls (minimize, maximize, close) at the top right. At the bottom of the screen, there is a dark taskbar with various icons for applications like File Explorer, Edge, and others. The system tray shows the date and time as "03-11-2025 22:13".

```
enter the parenthesized expression((a+b-c+f*m)/n*k/(g+h))
the converted infix expression is ab+c-fm*n/k*gh+/
Process returned 0 (0x0)   execution time : 91.833 s
Press any key to continue.
```