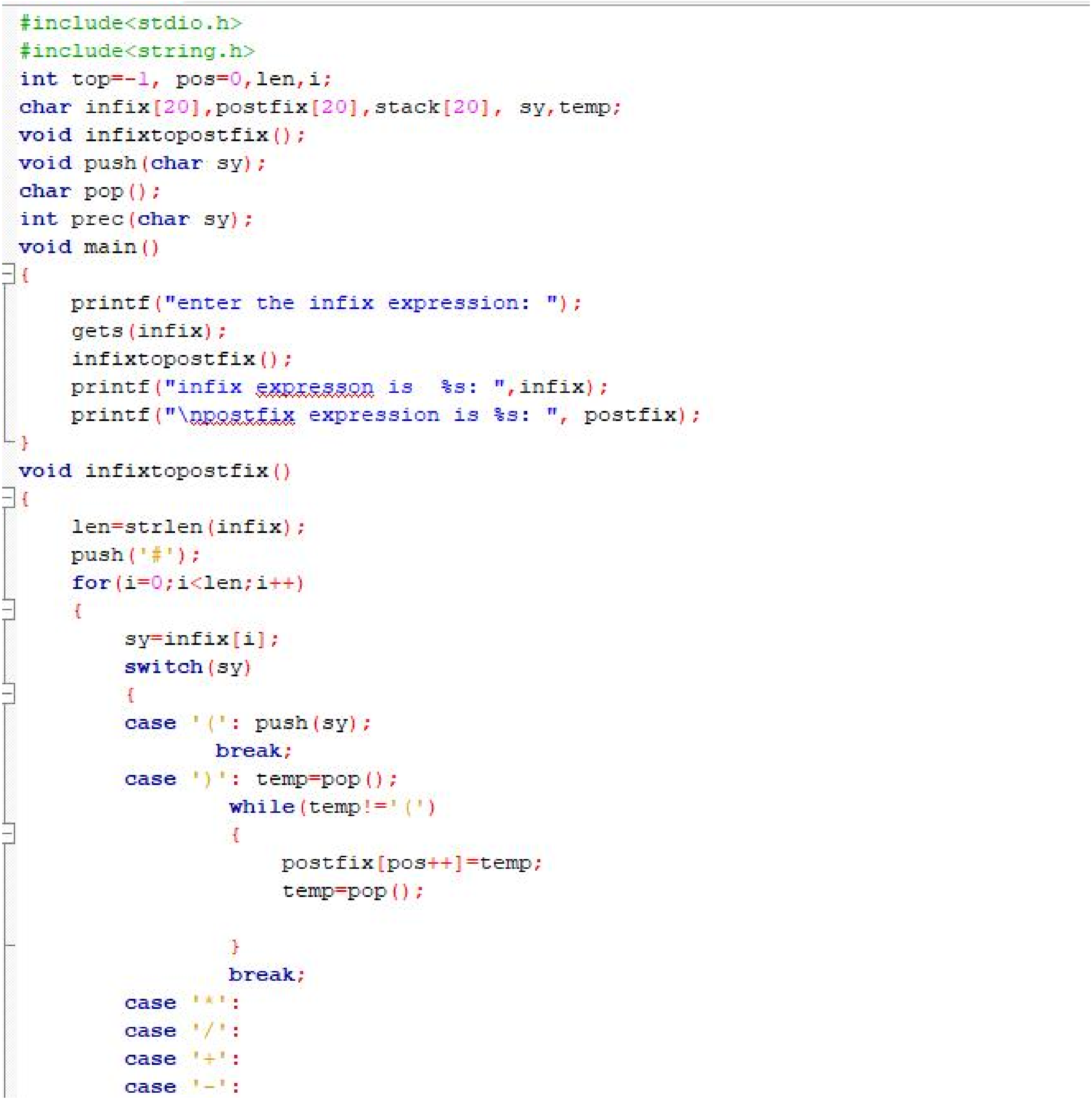
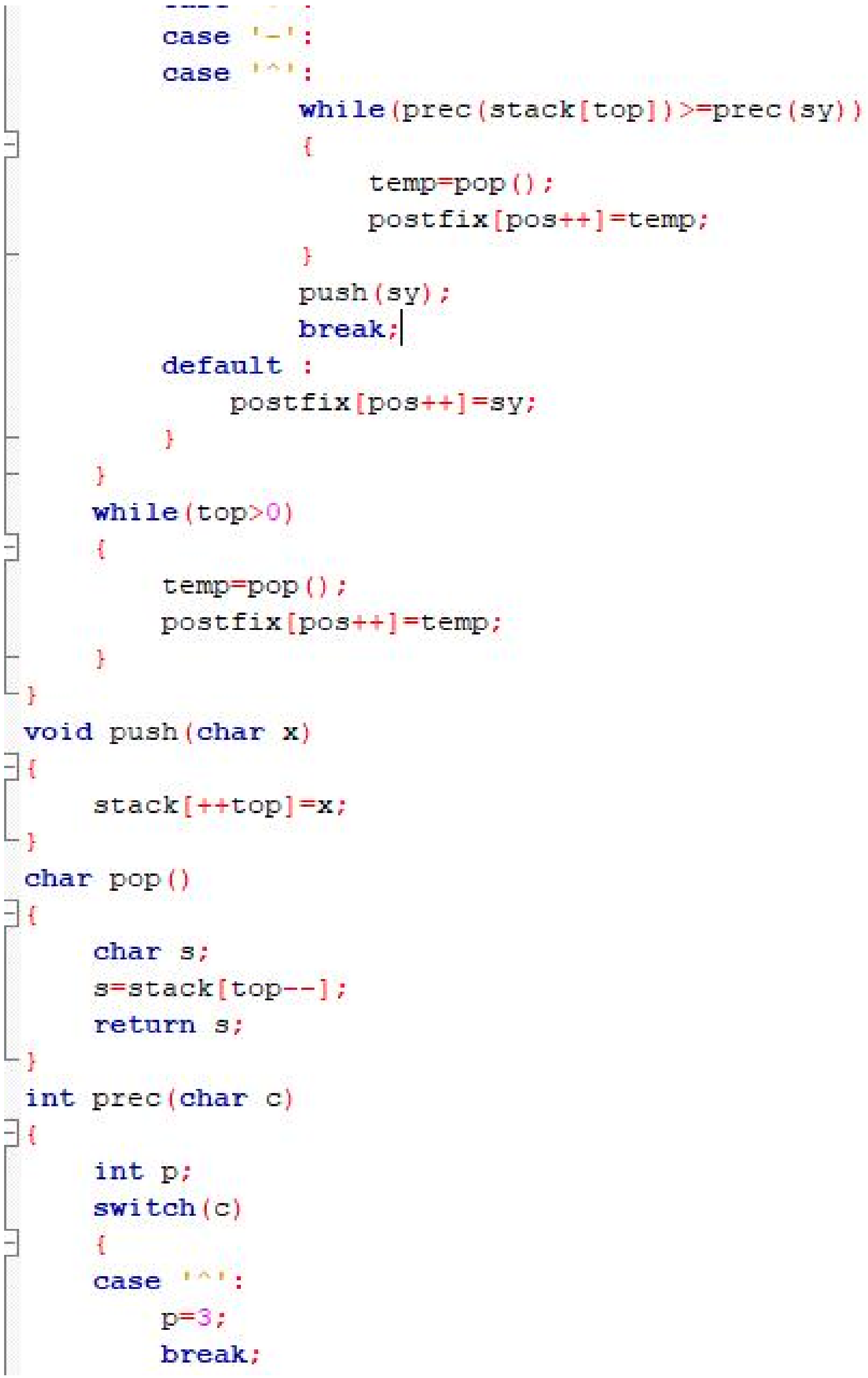
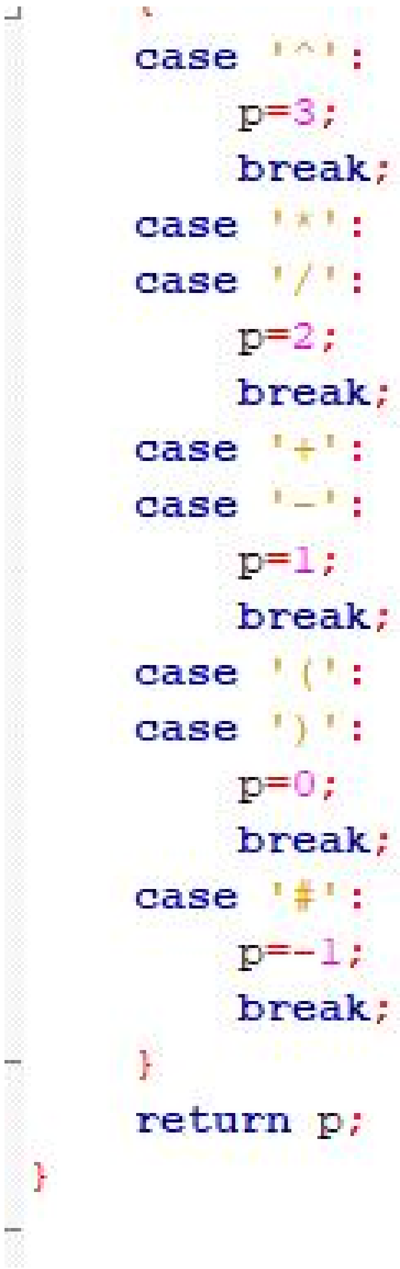


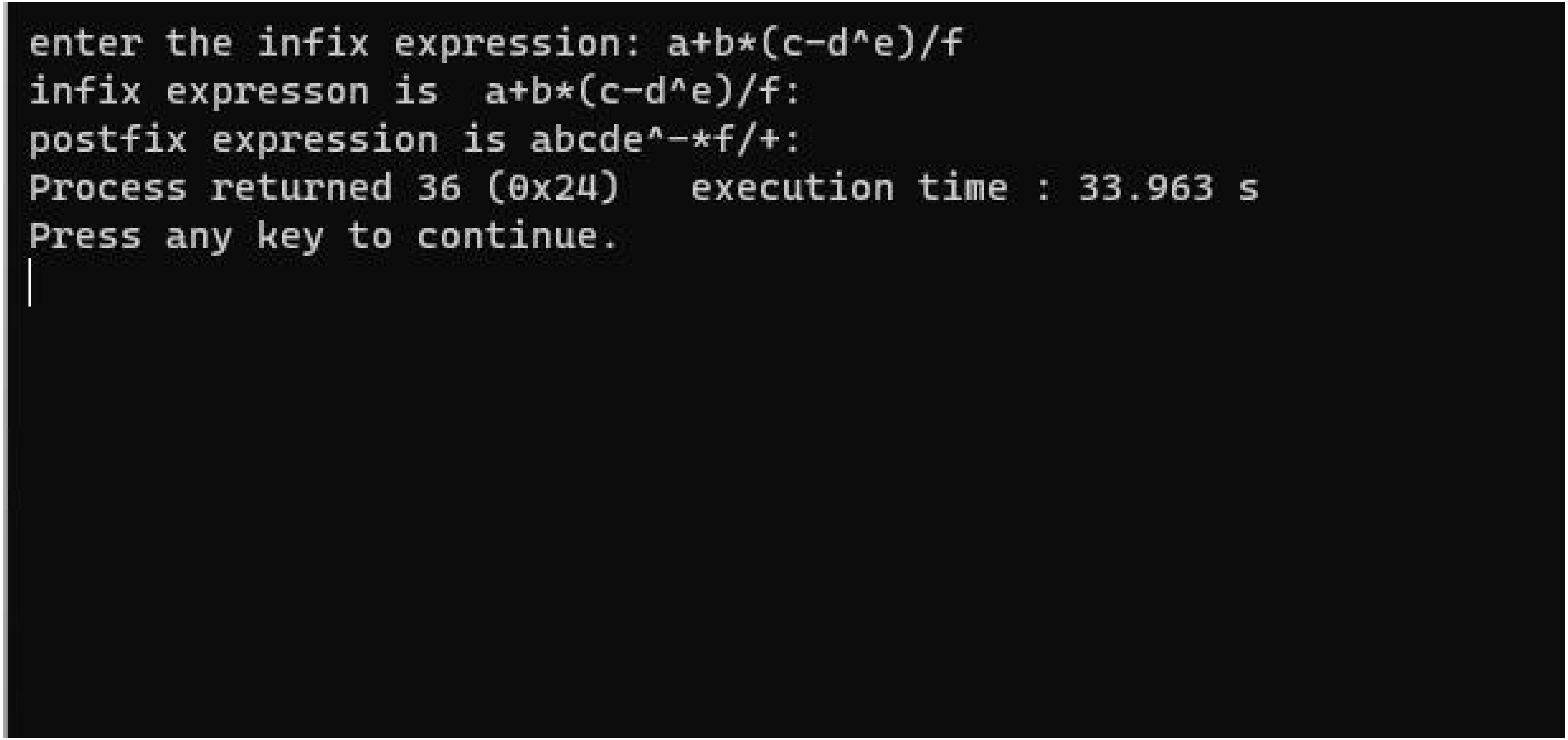
```
#include<stdio.h>
#include<string.h>
int top=-1, pos=0,len,i;
char infix[20],postfix[20],stack[20], sy,temp;
void infixtopostfix();
void push(char sy);
char pop();
int prec(char sy);
void main()
{
    printf("enter the infix expression: ");
    gets(infix);
    infixtopostfix();
    printf("infix expresson is  %s: ",infix);
    printf("\npostfix expression is %s: ", postfix);
}
void infixtopostfix()
{
    len=strlen(infix);
    push('#');
    for(i=0;i<len;i++)
    {
        sy=infix[i];
        switch(sy)
        {
        case '(': push(sy);
               break;
        case ')': temp=pop();
                while(temp!='(')
                {
                    postfix[pos++]=temp;
                    temp=pop();

                }
                break;
        case '*':
        case '/':
        case '+':
        case '-':
```



```
        case '-':
        case '^':
                while(prec(stack[top])>=prec(sy))
                {
                    temp=pop();
                    postfix[pos++]=temp;
                }
                push(sy);
                break;
        default :
            postfix[pos++]=sy;
        }
    }
    while(top>0)
    {
        temp=pop();
        postfix[pos++]=temp;
    }
}
void push(char x)
{
    stack[++top]=x;
}
char pop()
{
    char s;
    s=stack[top--];
    return s;
}
int prec(char c)
{
    int p;
    switch(c)
    {
    case '^':
        p=3;
        break;
```



```
    case '^':
        p=3;
        break;
    case '*':
    case '/':
        p=2;
        break;
    case '+':
    case '-':
        p=1;
        break;
    case '(':
    case ')':
        p=0;
        break;
    case '#':
        p=-1;
        break;
    }
    return p;
}
```



```
enter the infix expression: a+b*(c-d^e)/f
infix expresson is  a+b*(c-d^e)/f:
postfix expression is abcde^-*f/+:
Process returned 36 (0x24)   execution time : 33.963 s
Press any key to continue.
```