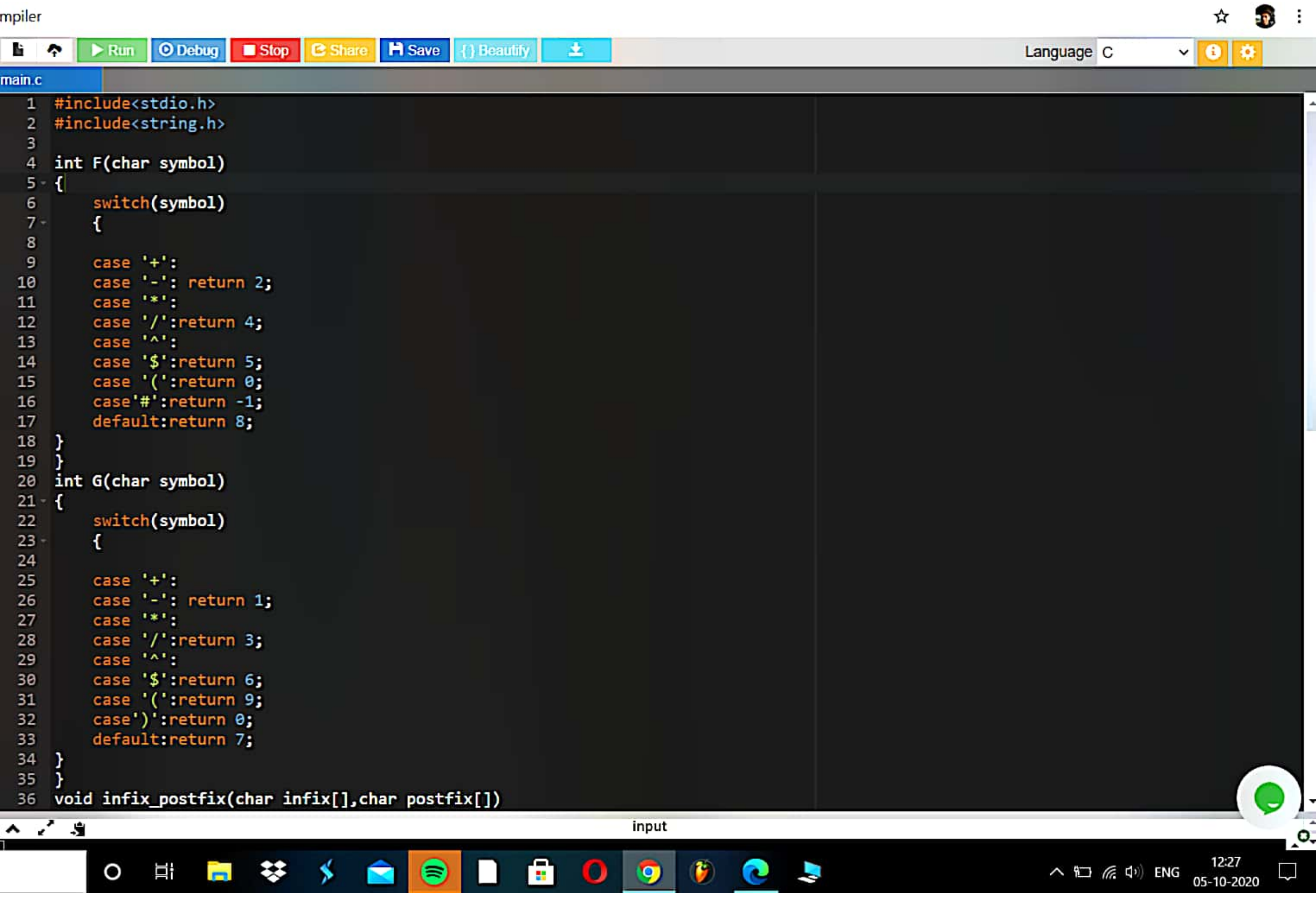
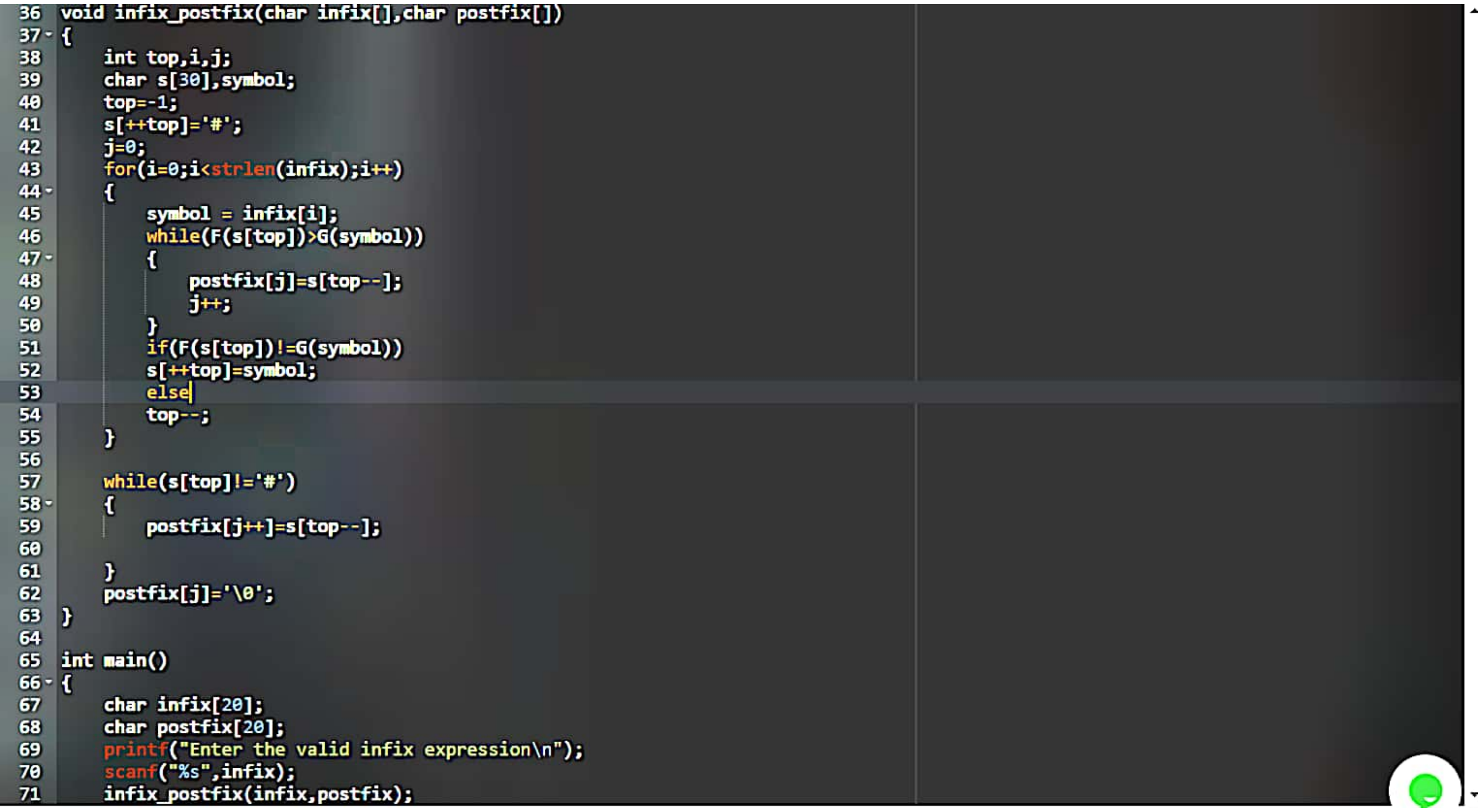
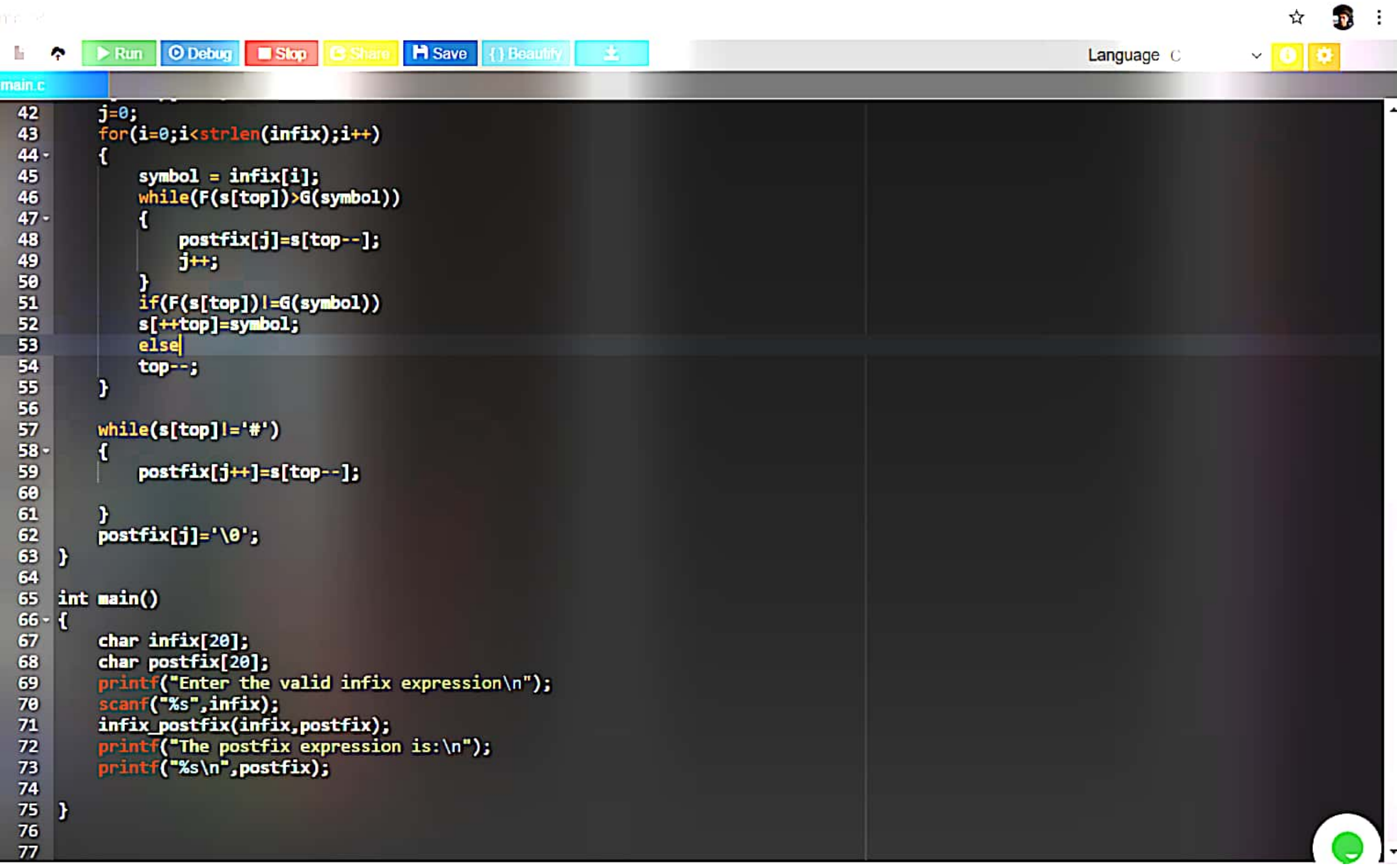


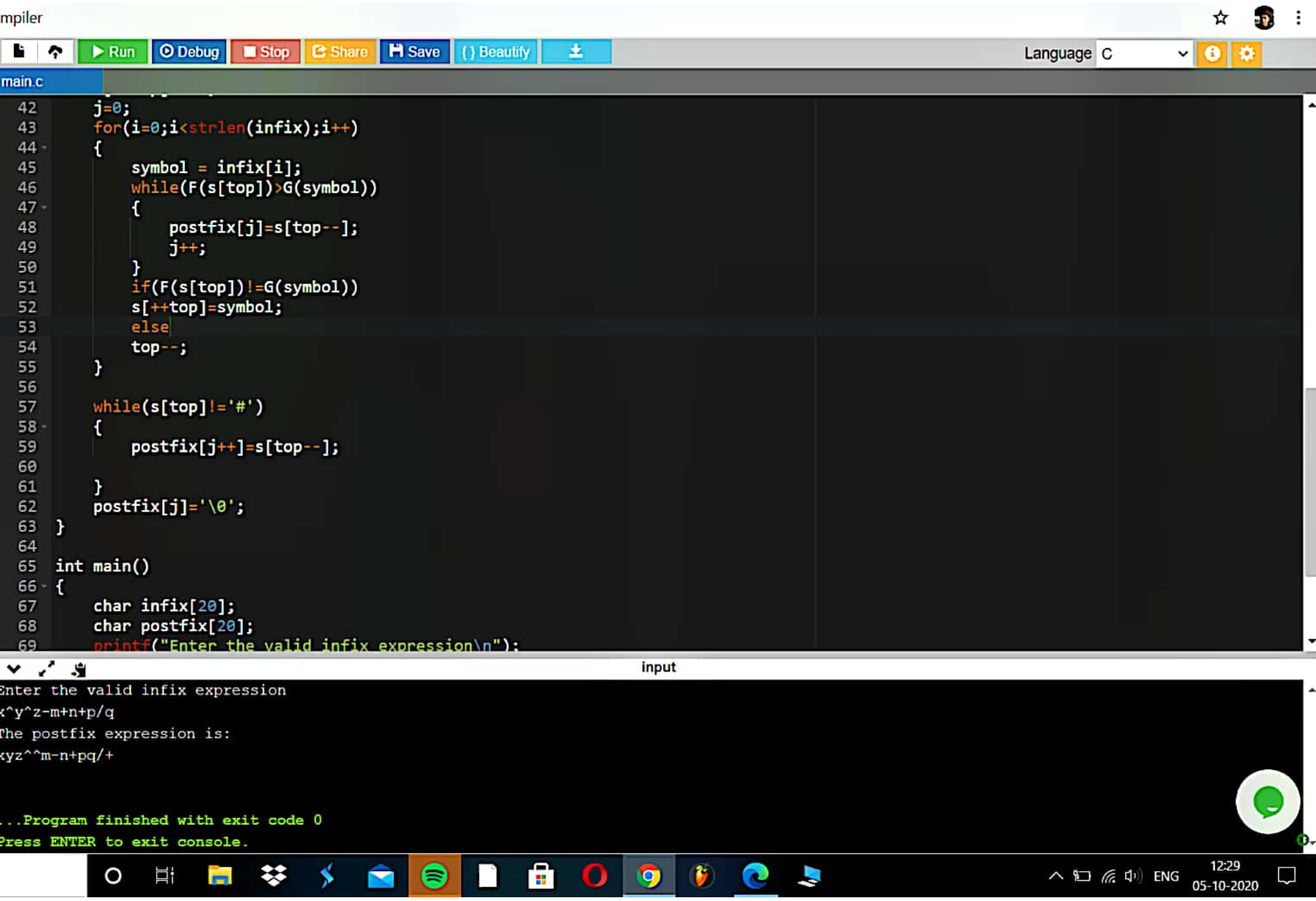
```c
#include<stdio.h>
#include<string.h>

int F(char symbol)
{
    switch(symbol)
    {

    case '+':
    case '-': return 2;
    case '*':
    case '/':return 4;
    case '^':
    case '$':return 5;
    case '(':return 0;
    case'#':return -1;
    default:return 8;
}
}
int G(char symbol)
{
    switch(symbol)
    {

    case '+':
    case '-': return 1;
    case '*':
    case '/':return 3;
    case '^':
    case '$':return 6;
    case '(':return 9;
    case')':return 0;
    default:return 7;
}
}
void infix_postfix(char infix[],char postfix[])
```



```
void infix_postfix(char infix[],char postfix[])
{
    int top,i,j;
    char s[30],symbol;
    top=-1;
    s[++top]='#';
    j=0;
    for(i=0;i<strlen(infix);i++)
    {
        symbol = infix[i];
        while(F(s[top])>G(symbol))
        {
            postfix[j]=s[top--];
            j++;
        }
        if(F(s[top])!=G(symbol))
        s[++top]=symbol;
        else
        top--;
    }

    while(s[top]!='#')
    {
        postfix[j++]=s[top--];

    }
    postfix[j]='\0';
}

int main()
{
    char infix[20];
    char postfix[20];
    printf("Enter the valid infix expression\n");
    scanf("%s",infix);
    infix_postfix(infix,postfix);
```

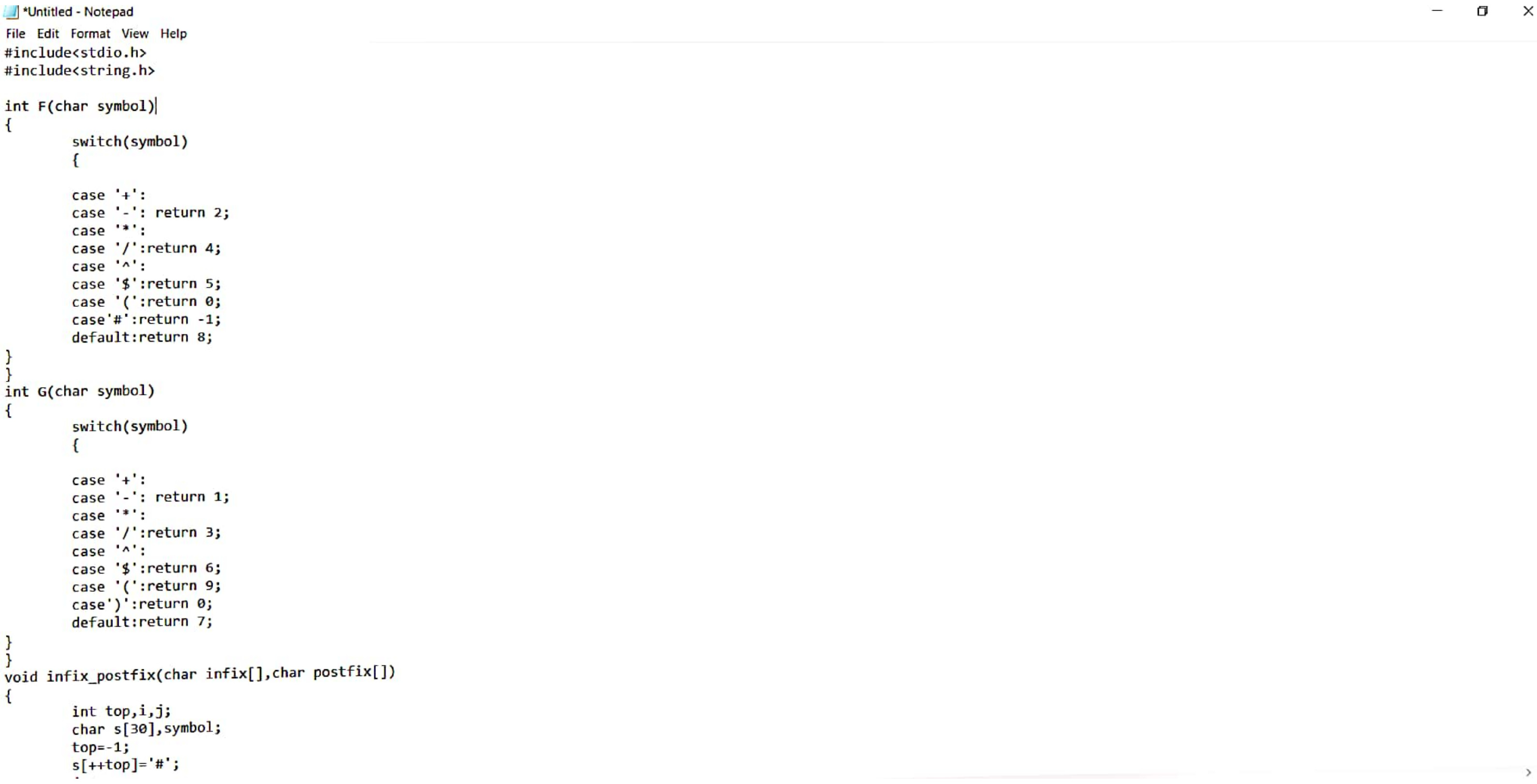


```
    j=0;
    for(i=0;i<strlen(infix);i++)
    {
        symbol = infix[i];
        while(F(s[top])>G(symbol))
        {
            postfix[j]=s[top--];
            j++;
        }
        if(F(s[top])!=G(symbol))
        s[++top]=symbol;
        else
        top--;
    }

    while(s[top]!='#')
    {
        postfix[j++]=s[top--];

    }
    postfix[j]='\0';
}

int main()
{
    char infix[20];
    char postfix[20];
    printf("Enter the valid infix expression\n");
    scanf("%s",infix);
    infix_postfix(infix,postfix);
    printf("The postfix expression is:\n");
    printf("%s\n",postfix);

}
```

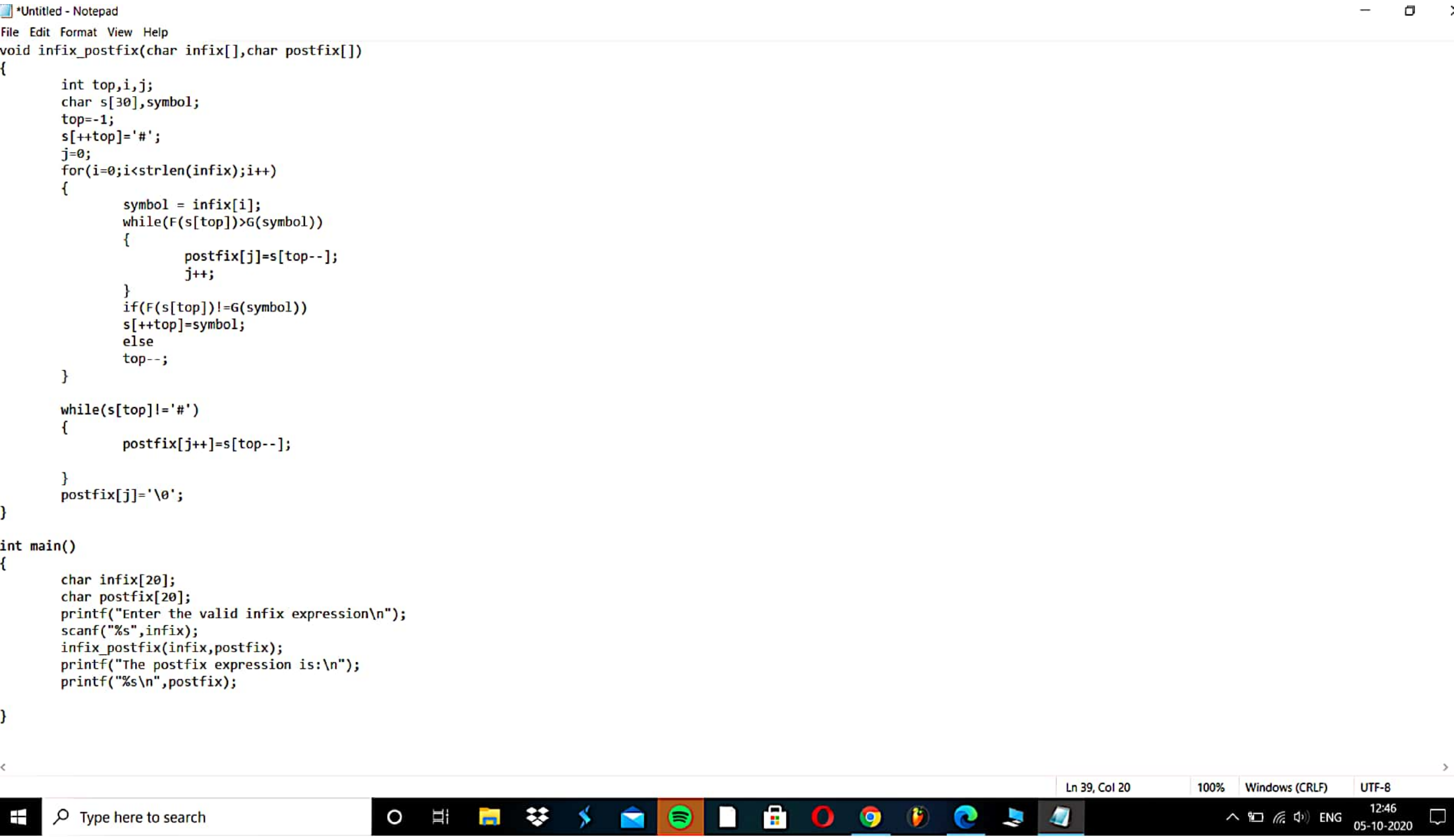


```c
    j=0;
    for(i=0;i<strlen(infix);i++)
    {
        symbol = infix[i];
        while(F(s[top])>G(symbol))
        {
            postfix[j]=s[top--];
            j++;
        }
        if(F(s[top])!=G(symbol))
        s[++top]=symbol;
        else
        top--;
    }

    while(s[top]!='#')
    {
        postfix[j++]=s[top--];

    }
    postfix[j]='\0';
}

int main()
{
    char infix[20];
    char postfix[20];
    printf("Enter the valid infix expression\n");
```

```
Enter the valid infix expression
x^y^z-m+n+p/q
The postfix expression is:
xyz^^m-n+pq/+


...Program finished with exit code 0
Press ENTER to exit console.
```



```
#include<stdio.h>
#include<string.h>

int F(char symbol)
{
        switch(symbol)
        {

        case '+':
        case '-': return 2;
        case '*':
        case '/':return 4;
        case '^':
        case '$':return 5;
        case '(':return 0;
        case'#':return -1;
        default:return 8;
}
}
int G(char symbol)
{
        switch(symbol)
        {

        case '+':
        case '-': return 1;
        case '*':
        case '/':return 3;
        case '^':
        case '$':return 6;
        case '(':return 9;
        case')':return 0;
        default:return 7;
}
}
void infix_postfix(char infix[],char postfix[])
{
        int top,i,j;
        char s[30],symbol;
        top=-1;
        s[++top]='#';
```



```
void infix_postfix(char infix[],char postfix[])
{
        int top,i,j;
        char s[30],symbol;
        top=-1;
        s[++top]='#';
        j=0;
        for(i=0;i<strlen(infix);i++)
        {
                symbol = infix[i];
                while(F(s[top])>G(symbol))
                {
                        postfix[j]=s[top--];
                        j++;
                }
                if(F(s[top])!=G(symbol))
                s[++top]=symbol;
                else
                top--;
        }

        while(s[top]!='#')
        {
                postfix[j++]=s[top--];

        }
        postfix[j]='\0';
}

int main()
{
        char infix[20];
        char postfix[20];
        printf("Enter the valid infix expression\n");
        scanf("%s",infix);
        infix_postfix(infix,postfix);
        printf("The postfix expression is:\n");
        printf("%s\n",postfix);

}
```