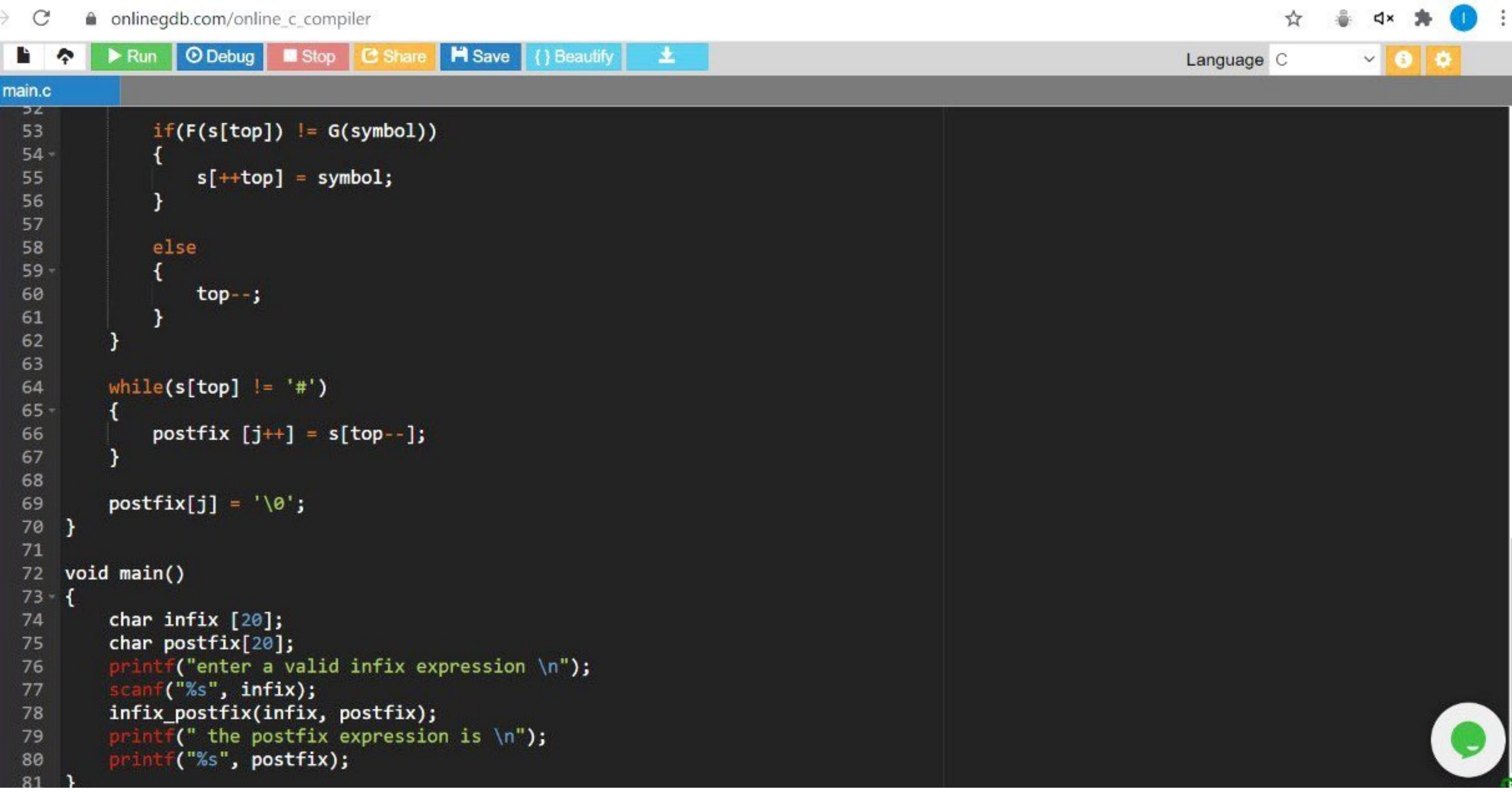
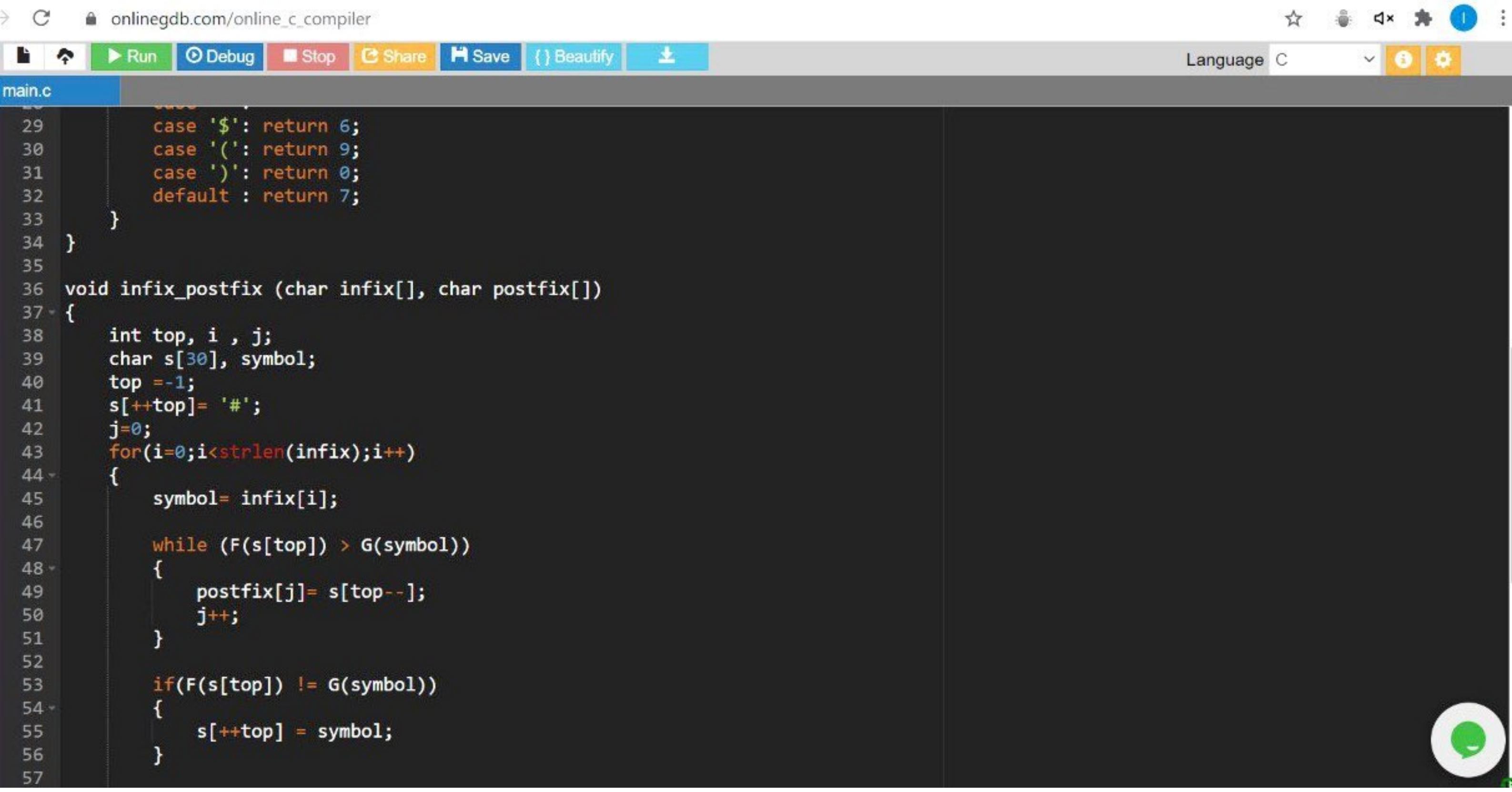
```
#include <stdio.h>
# include <string.h>
# include <process.h>
int F (char symbol)                    // stack precedence : F
  {
     switch (symbol)
       {
          case '+' :
          case '-' : return 2;
          case '*' :
          case '/' : return 4;
          case '^' :
          case '$' : return 5;
          case '(' : return ~~6;~~ 0;
         ~~a~~ case '#' : return -1;
          default : return 8;
       }
}

int G (char symbol)                    // input string : G
{
   switch (symbol)
     {
        case '+' :
        case '-' : return 1;
        case '*' :
        case '/' : return 3;
        case '^':
        case '$': return 6;
        case '(': return 9;
        case ')': return 0;
        ~~case '#':~~
        default: return 7.;
    }
}

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[~~j~~ 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';
}
```

```
void main ()
   {
       char infix [20];
       char postfix [20];
       clrscr ();
       printf (" Enter the valid infix expression \n");
       scanf (" %s", infix);
       infix_postfix (infix, postfix);
       printf ("the postfix exp is \n");
       printf(" %\n", postfix);
       getch();
   }
```

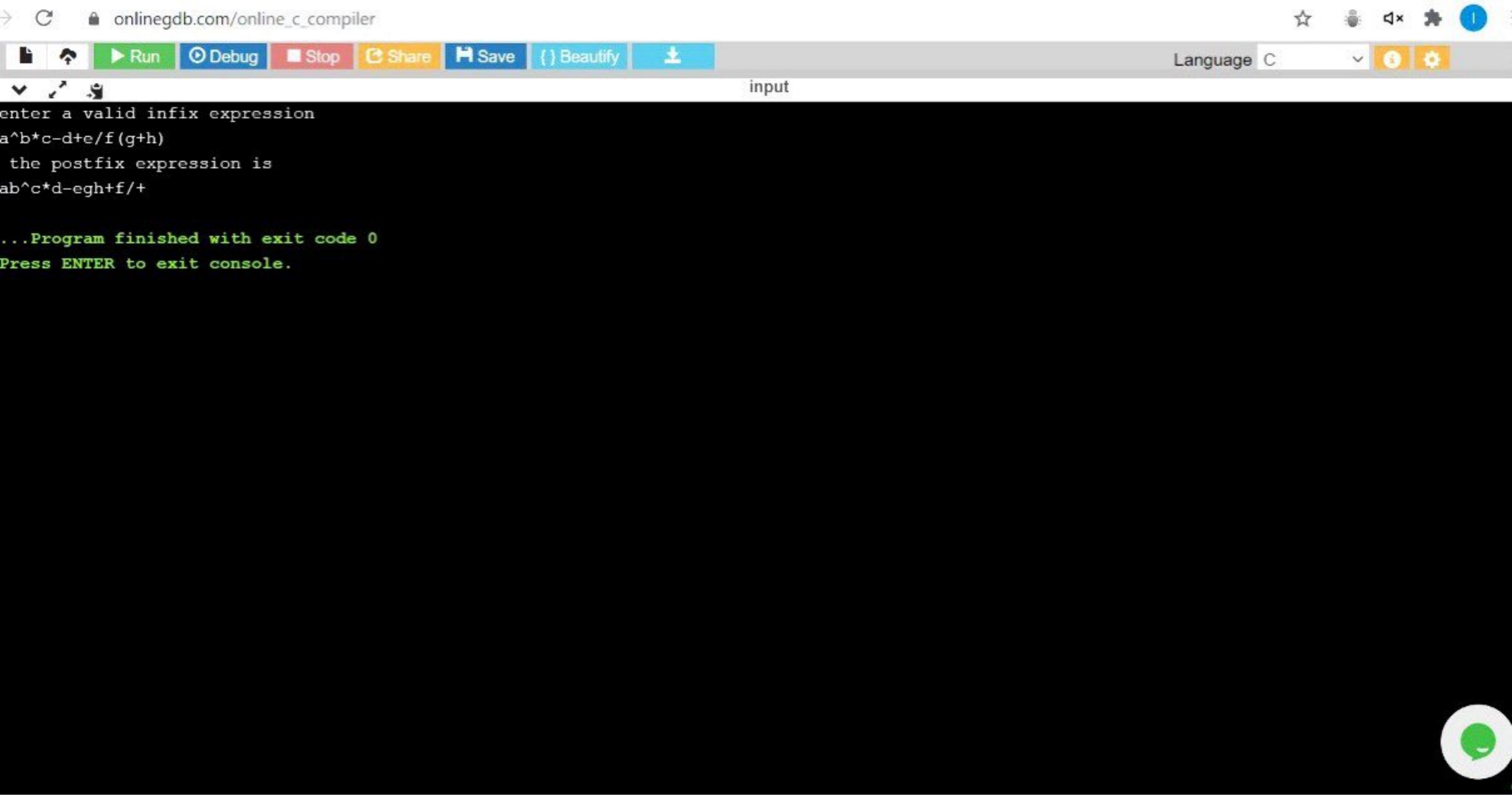


```
        if(F(s[top]) != G(symbol))
        {
            s[++top] = symbol;
        }

        else
        {
            top--;
        }
    }

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

    postfix[j] = '\0';
}

void main()
{
    char infix [20];
    char postfix[20];
    printf("enter a valid infix expression \n");
    scanf("%s", infix);
    infix_postfix(infix, postfix);
    printf(" the postfix expression is \n");
    printf("%s", postfix);
}
```



```
        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]= '#';
    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;
        }

```

Scanned with CamScanner



```
enter a valid infix expression
a^b*c-d+e/f(g+h)
 the postfix expression is
ab^c*d-egh+f/+

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