```
nclude<stdio.h>
nclude<string.h>
t 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;
  }

t 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;
  }
```

input

```
id infix_postfix(char infix[],char postfix[])

    int top,j,i;
    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';

id main()

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

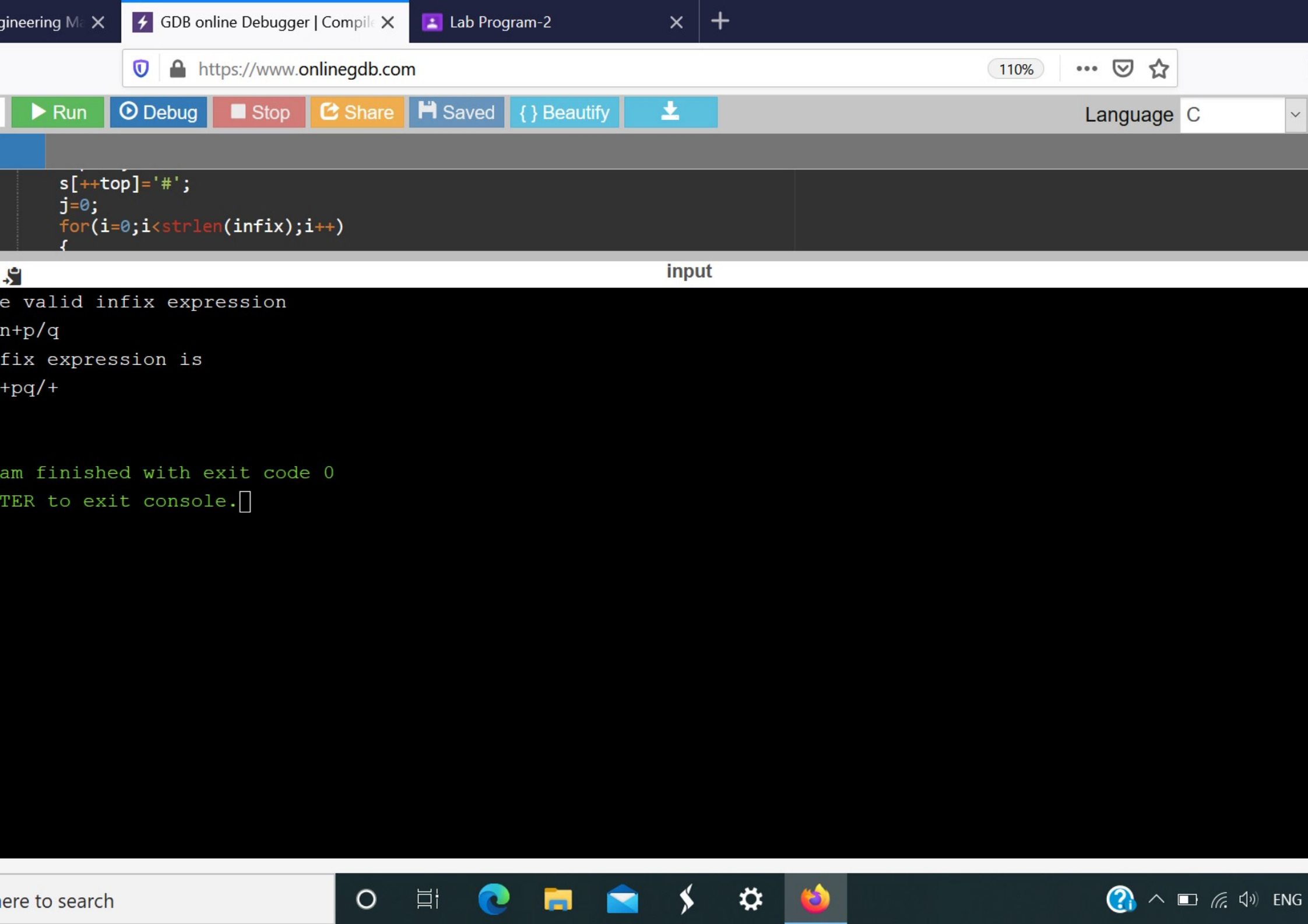
input

```
    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';

id 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);
```

input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GDB online Debugger | Compile
Lab Program-2
https://www.onlinegdb.com
110%
Run
Debug
Stop
Share
Saved
{ } Beautify
Language
C
s[++top]='#';
j=0;
for(i=0;i<strlen(infix);i++)
{
input
e valid infix expression
n+p/q
fix expression is
+pq/+
am finished with exit code 0
TER to exit console.
here to search
ENG