operator=set(['+','-','\*','/','(',')','^'])

PRIORITY={'+':1,'-':1,'\*':2,'/':2,'^':3}

def infix\_to\_postfix(expression):

stack=[]

output=''

for ch in expression:

if ch not in operator:

output+=ch

elif ch=='(':

stack.append('(')

elif ch==')':

while stack and stack[-1]!='(':

output+=stack.pop()

stack.pop()

else:

while stack and stack[-1]!='(' and PRIORITY[ch]<= PRIORITY[stack[-1]]:

output+=stack.pop()

stack.append(ch)

while stack:

output+=stack.pop()

return output

expression=input("enter infix expression:")

print("infix expression",expression)

print("postfix expression",infix\_to\_postfix(expression))