Infix to Postfix

Infix: 2+(3*3)/(7-4) Postfix: 233*74-/+

Step 1: Using ‘for’ loop, iterate the string
Step 2a: If string[i] is a number, then append it to a stack
Step 2b: If string[i] is a operator, we need to perform the following:
res = stack[top-1] (operator) stack[top]
Step 3: When the loop ends, print stack[top] which is the answer

char = 2

stack.push(char)

char = 3

stack.push(char)

char = 3

stack.push(char)

char = *

n2 = stack.top()
stack.pop()
n1 = stack.top()
stack.pop()
write a function “arith” to check if operator it is
res = arith(n1,n2,char)
res = 3 * 3 = 9
stack.push(res)

char = 7

stack.push(char)

char = 4

stack.push(char)

char = -

n2 = stack.top()
stack.pop()
n1 = stack.top()
stack.pop()
write a function “arith” to check if operator it is
res = arith(n1,n2,char)
res = 7 - 4 = 3
stack.push(res)

2 9 3

char = /

2 9 3

n2 = stack.top()
stack.pop()
n1 = stack.top()
stack.pop()
write a function “arith” to check if operator it is
res = arith(n1,n2,char)
res = 9 / 3 = 3
stack.push(res)

2 3

char = +

2 3

n2 = stack.top()
stack.pop()
n1 = stack.top()
stack.pop()
write a function “arith” to check if operator it is
res = arith(n1,n2,char)
res = 2 + 3 = 5
stack.push(res)

5

res = stack[top]

Hence, the result is 5