CSC148 Worksheet 9 Solution

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Question 1

Expression 1:

6
+
)
8
*
9

-

1

(

Stack

Were the parentheses balanced?

Yes   No

Expression 2:

a
)
b
-
2

/
)
)
)
b

+
)
3

*

Stack

Were the parentheses balanced?

Yes   No

Expression 3 :

(

        6
)
        +
        4

Stack

Were the parentheses balanced?

Yes   No

Question 2

a. For each character being received,

1. If the character is left parenthesis, then we need to store it in stack using *push()* method
2. If the character is right parenthesis
    1. First, check for the non-emptiness of stack.
    2. If the list is not empty, then we need to pop an element form stack.
    3. If list is empty, then we need to raise error.
3. If the character is other than left or right parenthesis, then pass the character.

Question 3

Question 4