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1  """
2  CSE212
3  (c) BYU-Idaho
4  03-Prove - Problem 2
5
6  It is a violation of BYU-Idaho Honor Code to post or share this code with others or
7  to post it online.  Storage into a personal and private repository (e.g. private
8  GitHub repository, unshared Google Drive folder) is acceptable.
9  """
10
11 def is_float(text):
12     try:
13         float(text)
14         return True
15     except:
16         return False
17
18 def mystery_2(text):
19     stack = []
20     for item in text.split(' '):
21         if item == "+" or item == "-" or item == "*" or item == "/" :
22             if len(stack) < 2:
23                 print("Invalid Case 1!")
24                 return None
25             op2 = stack.pop()
26             op1 = stack.pop()
27             if item == "+":
28                 res = op1 + op2
29             elif item == "-":
30                 res = op1 - op2
31             elif item == "*":
32                 res = op1 * op2
33             else:
34                 if op2 == 0:
35                     print("Invalid Case 2!")
36                     return None
37                 res = op1 / op2
38             stack.append(res)
39         elif is_float(item):
40             stack.append(float(item))
41         elif item == "":
42             pass
43         else:
44             print("Invalid Case 3!")
45             return None
46     if len(stack) != 1:
47         print("Invalid Case 4!")
48         return None
49     return stack[0]
50
51
```