Topic - Recursion

Easy – Difficulty: – Product Sum

Problem Statement:

Write a function that takes in a "special" array and returns its product sum.

A "special" array is a non-empty array that contains either integers or other "special" arrays. The product sum of a "special" array is the sum of its elements, where "special" arrays inside it are summed themselves and then multiplied by their level of depth.

The depth of a "special" array is how far nested it is. For instance, the depth of [] is 1; the depth of the inner array in [[]] is 2; the depth of the innermost array in [[[]]] is 3.

Therefore, the product sum of [x, y] is x + y; the product sum of [x, [y, z]] is x + 2 * (y + z); the product sum of [x, [y, [z]]] is x + 2 * (y + 3z).

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Sample Input
  array = [5, 2, [7, -1], 3, [6, [-13, 8], 4]]

Sample Output
  12 // calculated as: 5 + 2 + 2 * (7 - 1) + 3 + 2 * (6 + 3 * (-13 + 8) + 4)
```