AlgoExpert Quad Layout JavaScript 14px Sublime Monokai 00:00:0

Our Solution(s) Run Code

Solution 1

```javascript
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// Average: O(n^2) time | O(n^2) space
// Worst: O(n^3) time | O(n^2) space
function fourNumberSum(array, targetSum) {
  const allPairSums = {};
  const quadruplets = [];
  for (let i = 1; i < array.length - 1; i++) {
    for (let j = i + 1; j < array.length; j++) {
      const currentSum = array[i] + array[j];
      const difference = targetSum - currentSum;
      if (difference in allPairSums) {
        for (const pair of allPairSums[difference]) {
          quadruplets.push(pair.concat([array[i], array[j]]));
        }
      }
    }
    for (let k = 0; k < i; k++) {
      const currentSum = array[i] + array[k];
      if (!(currentSum in allPairSums)) {
        allPairSums[currentSum] = [[array[k], array[i]]];
      } else {
        allPairSums[currentSum].push([array[k], array[i]]);
      }
    }
  }
  return quadruplets;
}

exports.fourNumberSum = fourNumberSum;
```

Your Solutions Run Code

Solution 1 **Solution 2** **Solution 3**

```javascript
function fourNumberSum(array, targetSum) {
  // Write your code here.
}

// Do not edit the line below.
exports.fourNumberSum = fourNumberSum;
```

Our Tests

[illegible]

Custom Output Submit Code

```
it('Test Case #[illegible]', function () {
  let output = program.fourNumberSum([1, 2, 3, 4, 5, 6, 7], 10);
  output = output.map(sortAndStringify);
  const quadruplets = [[1, 2, 3, 4]];
  chai.expect(output.length === 1).to.be.true;
  for (const quadruplet of quadruplets) {
    chai.expect(output).to.include(sortAndStringify(quadruplet));
  }
});

it('Test Case #[illegible]', function () {
  let output = program.fourNumberSum([7, 6, 4, -1, 1, 2], 16);
  output = output.map(sortAndStringify);
  const quadruplets = [
    [7, 6, 4, -1],
```

Run or submit code when you're ready.