Challenge 5: Find Two Pairs in List such that a+b = c+d

If you are given a list, can you find two pairs such that their sum is equal?

> **We'll cover the following** ∧
>
> - Problem Statement
>   - Input
>   - Output
>   - Sample Input
>   - Sample Output
> - Coding Exercise

Problem Statement

In this problem, you have to implement the `find_pair()` function which will find two pairs, `[a, b]` and `[c, d]`, in a list such that :

$$a + b = c + d$$

You only have to find the first two pairs in the list which satisfies the above condition.
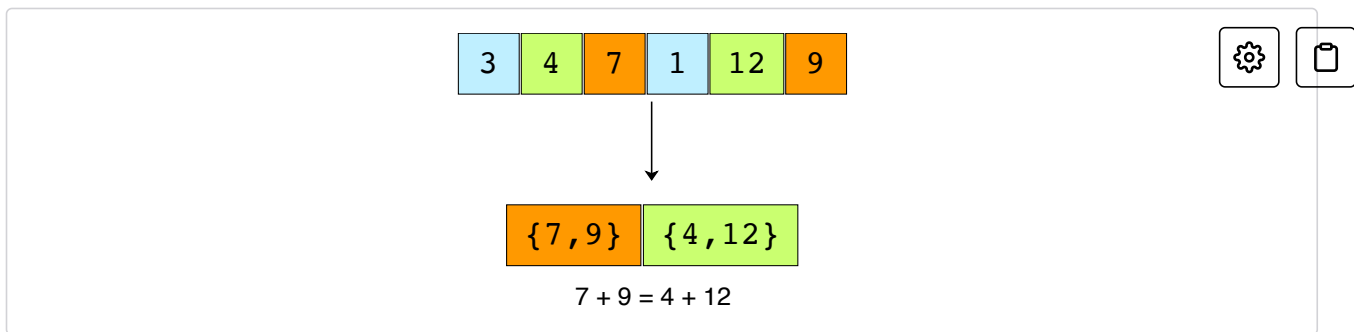
Input

A list of **distinct** integers.

Output

A list containing two pairs, (a, b) and (c, d), which satisfy $a + b = c + d$

Sample Input

```
my_list = [3, 4, 7, 1, 12, 9]
```

Sample Output

```
[[4,12],[7,9]]
```

```
3  4  7  1  12  9
        ↓
{7,9}  {4,12}
7 + 9 = 4 + 12
```

Coding Exercise

Design a step-by-step algorithm first before jumping on to the implementation. This problem is designed for your practice, so try to solve it on your own first. If you get stuck, you can always refer to the solution review.

Good luck!

```python
1  def find_pair(my_list):
2      # Write your code here
3      pass
4
```

✅ **Mark as Completed**

⊙ Report an Issue

⟨?⟩ Ask a Question
(https://discuss.educative.io/tag/challenge-5-find-two-pairs-in-list-such-that-ab--cd__introduction-to-hashing__data-structures-for-coding-interviews-in-python)