Problem Challenge 1

We'll cover the following

Quadruple Sum to Target (medium)

Given an array of unsorted numbers and a target number, find all **unique quadruplets** in it, whose **sum is equal to the target number**.

Example 1:

```
Input: [4, 1, 2, -1, 1, -3], target=1
Output: [-3, -1, 1, 4], [-3, 1, 1, 2]
Explanation: Both the quadruplets add up to the target.
```

Example 2:

```
Input: [2, 0, -1, 1, -2, 2], target=2
Output: [-2, 0, 2, 2], [-1, 0, 1, 2]
Explanation: Both the quadruplets add up to the target.
```

Try it yourself

Try solving this question here:

Java | Python3 | JS | C++

```python
def search_quadruplets(arr, target):
  arr.sort()
  quadruplets = []

  for i in range(len(arr)):
    for j in range(i+1, len(arr)):
      p, q = j+1, len(arr)-1

      while p < q:
        tempSum = arr[i] + arr[j] + arr[p] + arr[q]
        if tempSum == target:
          quadruplets.append([arr[i], arr[j], arr[p], arr[q]])

        while p < q and arr[p+1] == arr[p]:
          p += 1
        while q > q and arr[q-1] == arr[q]:
          q -= 1

        if tempSum > target:
          q -= 1
        else:
          p += 1

  return quadruplets
```

Test | Save | Reset