1. Implement the following methods of **Lodash**.

- findIndex()
- flatten()
- flattenDeep()
- join()
- indexOf()
- pull()
- remove()
- reverse()
- tail()
- castArr()
- every()
- filter()

2. Given an array, write a function to calculate its depth. Assume that a normal array has a depth of 1.

```
depth([1, 2, 3, 4]) → 1

depth([1, [2, 3, 4]]) → 2

depth([1, [2, [3, 4]]]) → 3

depth([1, [2, [3, [4]]]]) → 4
```

3. Create a function that returns all **pairs** of numbers in an array that sum to a target. Sort the pairs in ascending order with respect to the smaller number, then order each pair in this order: `[smaller, larger]`.

```
allPairs([2, 4, 5, 3], 7) → [[2, 5], [3, 4]]
// 2 + 5 = 7, 3 + 4 = 7

allPairs([5, 3, 9, 2, 1], 3) → [[1, 2]]

allPairs([4, 5, 1, 3, 6, 8], 9) → [[1, 8], [3, 6], [4, 5]]
// Sorted: 1 < 3 < 4; each pair is ordered [smaller, larger]
```

4. Write a function that takes in an array of integers and returns the integers that are either **palindromes** or **almost-palindromes**. An **almost-palindrome** is any integer that can be rearranged to form a palindrome.

For example, the numbers `677` and `338` are both **almost-palindromes**, since they can be rearranged to form `767` and `383`, respectively.

```
 palindromeSieve([443, 12, 639, 121, 3232]) ➞ [443, 121, 3232]
// Since 443 => 434; 121 is a palindrome; 3232 => 2332 or 3223

palindromeSieve([5, 55, 6655, 8787]) ➞ [5, 55, 6655, 8787]
// Single-digit numbers are automatically palindromes.

palindromeSieve([897, 89, 23, 54, 6197, 53342]) ➞ []
```

5. Create a function that takes an array of football clubs with properties: `name, wins, loss, draws, scored, conceded`, and returns the **team name** with the highest number of points. If two teams have the **same number of points**, return the team with the **largest goal difference**.

How to Calculate Points and Goal Difference

```
team = { name: "Manchester United", wins: 30, loss: 3, draws: 5, scored:
88, conceded: 20 }

Total Points = 3 * wins + 0 * loss + 1 * draws = 3 * 30 + 0 * 3 + 5 * 1 =
95 points
Goal Difference = scored - conceded = 88 - 20 = 68
```

Examples

```
champions([
  {
    name: "Manchester United",
    wins: 30,
    loss: 3,
    draws: 5,
```

```
    scored: 88,
    conceded: 20,
  },
  {
    name: "Arsenal",
    wins: 24,
    loss: 6,
    draws: 8,
    scored: 98,
    conceded: 29,
  },
  {
    name: "Chelsea",
    wins: 22,
    loss: 8,
    draws: 8,
    scored: 98,
    conceded: 29,
  },
  ])
→ "Manchester United"
```