Specscart Backend Developer

Note: You can give answers to these questions in any language.

Question 1.

John and his friend Mike found some silver piles. They decided to follow simple rules to distribute the silver amongthem.

1. silver will be divided into npiles.
2. Each person will choose bigger silver pile either from far left or farright.
3. If the weight of both piles is equal then the person will choose leftpile.

Help them by creating a function that takes an array of silver piles $silver and returns a two-element array with [John's silver, Mike'ssilver].

Examples
silverDistribution([4, 2, 9, 5, 2, 7]) → [14,15]
// John will choose 7, Remaining piles = [4, 2, 9, 5,2]
// Mike will choose 4, Remaining piles = [2, 9, 5,2]
// John will choose 2, Remaining piles = [9, 5,2]
// Mike will choose 9, Remaining piles = [5,2]
// John will choose 5, Remaining piles =[2]
// Mike will choose2
// John = 7+2+5 = 14, Mike = 4+9+2 =15

silverDistribution([10, 1000, 2, 1]) → [12,1001]

silverDistribution([10, 9, 1, 2, 8, 4]) → [16,18]

Notes
John gets to pick his silver first!

Question 2.

Identify palindromic string pattern and return true orfalse

Example

isPalindrome('ABA') →true

isPalindrome('ABACABA') →true

isPalindrome('ABABAB') → false

Question 3.

Create a function that takes an array and string. The function should remove the letters in the string from the array, and return thearray.

Examples
removeLetters(["s", "t", "r", "i", "n", "g", "w"], "string") →["w"]

removeLetters(["b", "b", "l", "l", "g", "n", "o", "a", "w"], "balloon") → ["b", "g","w"]

removeLetters(["d", "b", "t", "e", "a", "i"], "edabit") →[]

Notes
1. If number of times a letter appears in the array is greater than the number of times the letter appears in the string, the extra letters should be left behind (see example#2).
2. If all the letters in the array are used in the string, the function should return an empty array (see example #3).

Question 4.

A ship has to transport cargo from one place to another, while picking up cargo along the way. Given the total amount of cargo and the types of cargo holds in the ship as arrays, create a function that returns true if each weight of cargo can fit in one hold, and false if itcan't.

"S" means 50 cargospace.
"M" means 100 cargospace.
"L" means 200 cargospace.

Examples
willFit(["M", "L", "L", "M"], [56, 62, 84, 90]) →true

willFit(["S", "S", "S", "S", "L"], [40, 50, 60, 70 , 80, 90, 200]) →false

willFit(["L", "L", "M"], [56, 62, 84, 90]) →true

Question 5.

Create a function that takes a Tic-tac-toe board and returns "X" if the X's are placed in a way that there are three X's in a row or returns "O" if there is three O's in arow.

Examples

```
whoWon([
  ["O", "X","O"],
  ["X", "X","O"],
  ["O", "X","X"]
]) →"X"

whoWon([
  ["O", "O","X"],
  ["X", "O","X"],
  ["O", "X","O"]
]) →"O"

whoWon([
  ["O", "O","X"],
  ["X", "X","O"],
  ["O", "X","O"]
]) →"Tie"
```

Notes

All places on the board will have either "X" or"O".

If both "X" and "O" win, return "Tie".