

QUESTION NO 1

ARRAY CONCATENATION

Given an integer array `nums` of length `n`, you want to create an array `ans` of length `2n` where `ans[i] == nums[i]` and `ans[i + n] == nums[i]` for $0 \leq i < n$ (**0-indexed**).

Simply explained, `ans` is the **concatenation** of two `nums` arrays. Your function should return the array `ans`.

Example 1:

Input: `nums = [1,2,1]`

Output: `[1,2,1,1,2,1]`

Explanation: The array `ans` is formed as follows:

- `ans = [nums[0],nums[1],nums[2],nums[0],nums[1],nums[2]]`
- `ans = [1,2,1,1,2,1]`

Example 2:

Input: `nums = [1,3,2,1]`

Output: `[1,3,2,1,1,3,2,1]`

Explanation: The array `ans` is formed as follows:

- `ans = [nums[0],nums[1],nums[2],nums[3],nums[0],nums[1],nums[2],nums[3]]`
- `ans = [1,3,2,1,1,3,2,1]`

QUESTION NO 2

NUMBER OF PRIMES

Write a function which takes only one argument `n` . The function should return number of primes found between `1` to `n` .

∴ A prime number is a whole number greater than 1 whose only factors are 1 and itself.

Example 1:

Input: `n = 10`

Output: `4`

Explanation: Because 2, 3, 5, 7 are only prime numbers between 1 to 10

Example 2:

Input: `n = 20`

Output: `19`

Explanation: Because 2, 3, 5, 7, 11, 13, 17, 19 are only prime numbers between 1 to 20

QUESTION NO 3

RICHEST CUSTOMER WEALTH

You are given an $m \times n$ integer grid named `accounts` where `accounts[i][j]` is the amount of money the i^{th} customer has in the j^{th} bank. Return the **wealth** that the richest customer has.

A customer's **wealth** is the amount of money they have in all their bank accounts. The richest customer is the customer that has the maximum **wealth**.

Example 1:

Input: `accounts = [[1,2,3],[3,2,1]]`

Output: 6

Explanation:

1st customer has `wealth = 1 + 2 + 3 = 6`

2nd customer has `wealth = 3 + 2 + 1 = 6`

Both customers are considered the richest with a wealth of 6 each, so return 6.

Example 2:

Input: `accounts = [[1,5],[7,3],[3,5]]`

Output: 10

Explanation:

1st customer has `wealth = 6`

2nd customer has `wealth = 10`

3rd customer has `wealth = 8`

The 2nd customer is the richest with a wealth of 10.

Example 3:

Input: `accounts = [[2,8,7],[7,1,3],[1,9,5]]`

Output: 17

QUESTION NO 4

PALINDROME

Write a function which takes a word `n` as an argument and returns `true` if the word is **palindrome** or `false` if the word is not a **palindrome**.

∴ A **palindrome** is a word, phrase, number, or sequence of words that reads the same backward as forward.

Example 1:

Input: "maham"

Output: True

Example 2:

Input: "hello"

Output: False
