

### Question # 8

#### Description:

#### Merge Overlapping Intervals

Difficulty: Medium    Category: Array

Write a function that takes in a non-empty array of arbitrary intervals, merges any overlapping intervals, and returns the new intervals in no particular order. Each interval is an array of two integers, with interval[0] as the start of the interval and interval[1] as the end of the interval. Note that back-to-back intervals aren't considered to be overlapping. For example, [1, 5] and [6, 7] aren't overlapping; however, [1, 6] and [6, 7] are indeed overlapping. Also note that the start of any particular interval will always be less than or equal to the end of that interval.

Sample Input

```
intervals = [[1, 2], [3, 5], [4, 7], [6, 8], [9, 10]]
```

Sample Output

```
[[1, 2], [3, 8], [9, 10]] //
```

Merge the intervals [3, 5], [4, 7], and [6, 8]. // The intervals could be ordered differently

#### Directions :

- Solve the problem on your own.
- No group effort.
- If possible, provide more than one solution/strategy.
- Different approaches will be great for discussion.
- If you are stuck no problem. Student will experience the same.
- **Do not google it.** Try to build your own solution. It might be ugly no worries.
- We will discuss it on 3<sup>rd</sup> November 2021 09:30 EST.

**Good luck!**

**Fatih**