

## DAY 41

### INTERVIEW BIT PROBLEMS :

#### 1. Merge Overlapping Intervals

Given a collection of intervals, merge all overlapping intervals.

**For example:**

**Given** [1,3],[2,6],[8,10],[15,18],

**return** [1,6],[8,10],[15,18].

Make sure the returned intervals are sorted.

**CODE :**

**PYTHON**

**# Definition for an interval.**

**# class Interval:**

**# def \_\_init\_\_(self, s=0, e=0):**

**# self.start = s**

**# self.end = e**

class Solution:

**# @param intervals, a list of Intervals**

**# @return a list of Interval**

def merge(self, I):

    out = []

    I.sort(key=lambda x: x.start)

    for ele in I:

        if not out or out[-1].end < ele.start:

            out.append(ele)

        else:

            out[-1].end = max(out[-1].end, ele.end)

    return out