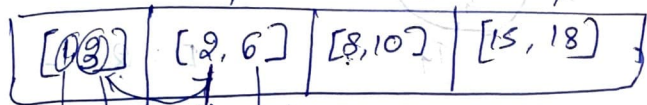


# Merge Overlapping Intervals



intervals[0] start end [1] end [2] [3]

Compare intervals[0] with intervals[1]

$$\text{intervals}[0][1] \geq \text{intervals}[1][0] \quad 8 \geq 8$$

$$\text{intervals}[0][0] < \text{intervals}[1][1]$$

$$\text{res} = \text{intervals}[0][0];$$

$$\text{res}[0][0]$$

$$\text{res}[0][1] = \text{intervals}[1][1];$$

~~intervals[1][1]~~

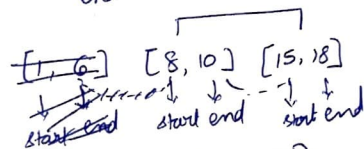
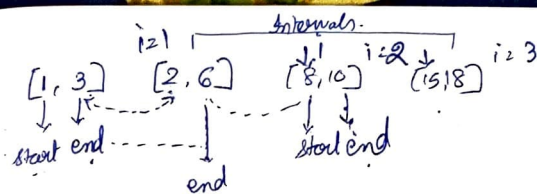
$$\text{res}[0][1] \geq \text{intervals}[2][0]$$

$$8 \geq 8$$

$$\text{res}[0][1] < \text{intervals}[2][1]$$

$$\text{res}[0][0] = \text{intervals}[0][0]$$

$$\text{res}[0][1] = \text{intervals}[1][1];$$



$$\text{res} = [1, 6] [8, 10] [15, 18]$$