**Exercise #3:**

**Let me assume a table(Intervals) as mentioned below:**

**Id From To**

1 1 3

2 4 7

3 2 5

4 9 11

5 13 16

6 15 17

Considering the input range as 6 and 10 to verify overlaps in table

SELECT Id

FROM intervals

WHERE to > 6

AND from < 10

**The results should be IDs 2 and 4.**

**Exercise #4:**

By reviewing the problem statement, I can see it needs more understanding on time complexity concept which I may need some time to go through it to understand.

Still, what I thought was how can I simplify the code more efficient as always. But I am not sure how much it will improve in time complexity**😊.** If you give some more time, I will make a study on it.

**Code Given:**

for i in LL

sort(LL[i])

Out := []

for i in LL

append(Out, PopLast(LL[i]))

return sort(Out)

**Code I suggest: (reduce 1 loop)**

Out := []

for i in LL

sort(LL[i])

append(Out, PopLast(LL[i]))

return sort(Out)

**Exercise #5:**

It’s been long time now since I worked with Regex. I know it is to deal with Pattern and Matcher class to match the expressions. I will refresh my memories for the syntax of regex.