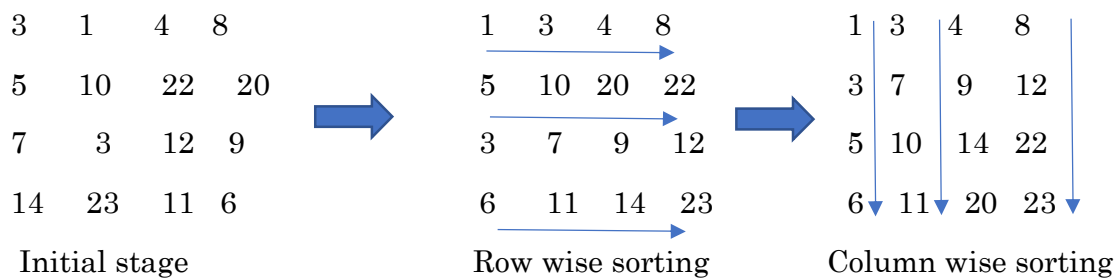# Design and Analysis of Algorithm (PCC-CS494)

Lab assignment

Submission date: 11/5/21

1. Implement Selection sort and Insertion sort algorithm.

2. Sort the 2D array using row wise and then column wise.

Example:

3	1	4	8
5	10	22	20
7	3	12	9
14	23	11	6

Initial stage

1	3	4	8
5	10	20	22
3	7	9	12
6	11	14	23

Row wise sorting

1	3	4	8
3	7	9	12
5	10	14	22
6	11	20	23

Column wise sorting

3. Sort in snake like order (shown in below)

3	11	6	16
8	1	5	10
14	7	12	2
4	13	9	15

Initial state

3	6	11	16
10	8	5	1
2	7	12	14
15	13	9	4

After phase 1

2	6	5	1
3	7	9	4
10	8	11	14
15	13	12	16

After phase 2

1	2	5	6
9	7	4	3
8	10	11	14
16	15	13	12

1	2	4	3
8	7	5	6
9	10	11	12
16	15	13	14

1	2	3	4
8	7	6	5
9	10	11	12
16	15	14	13