

Assignment 3

Write your answers in the provided space and upload it to Gradescope

NAME _____

ID _____

Question 1 (5 Points for grads, 15 points for undergrads)

It is given that the following data is stored in the disk in **row-major** order.

ColumnA	ColumnB	ColumnC	ColumnD
14	100	2	1
23	9	3	1
38	54	4	1
47	22	5	1
54	56	6	1
63	0	7	1
77	7	8	1
82	27	9	1

- Create a Dense index of ColumnB.
- Create Sparse index on ColumnA where every 2nd key is stored.
- Create Sparse index on ColumnB where every 2nd key is stored.

Question 2 (5 Points for grads, 15 points for undergrads)

It is given that the following data is stored in the disk in **column-major** order.

ColumnA	ColumnB	ColumnC	ColumnD
14	100	2	1
23	9	3	1
38	54	4	1
47	22	5	1
54	56	6	1
63	0	7	1
77	7	8	1
82	27	9	1

- Create a Dense index of ColumnB.
- Create Sparse index on ColumnA where every 2nd key is stored.
- Create Sparse index on ColumnB where every 2nd key is stored.

