CSP 509 Lab majorproject

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Experiment 1:

Dataset to used: A
Algorithm to be compared: 2-D Grid and Grid files
K values to be used: 5, 20, 50, 100
Bucket Size: 30
Cell Size:100 by 100

I take the Query point input in the form: (x, y). For K=5 i used 8 query point for plotting the graph and i found the average number of *bucket access* which are opened during the execution of knn in 2-d grid and grid files.
similarly, i used 4 different values of 'K' *i.e.* 5, 20, 50, 100 and apply the same process to find the the average number of *bucket access* which are opened during the execution of knn in 2-d grid and grid files.

0.1 Table:

8 different Query point for each K values

K = [5,20,50,100]		
Query point no.	Query point$x$	Query point y
1	371	241
2	155	364
3	297	109
4	154	162
5	395	119
6	345	151
7	191	106
8	280	249

0.2 Graph:

X-axis–value of k(5, 20, 50, 100)
Y-axis–average number of bucket access

Graph for 2-d grid and grid files for different value of K and average number of *Bucket access* using DataSet A

K = [5,20,50,100]		
KNN	2D bucket$x$	Grid Files Bucket y
5	63.125	1.875
20	71.0	5.125
50	87.25	9.625
100	111.5	12.375

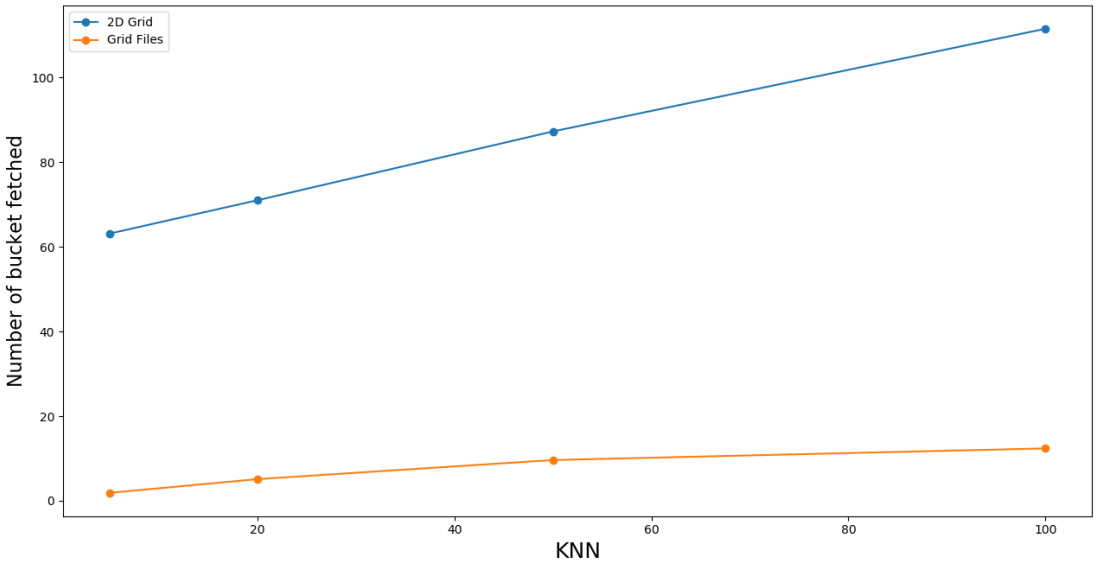

Figure1.1

Experiment 2:

Dataset to used: A
Algorithm to be compared: 2-D Grid and Grid files
K values to be used: 5, 20, 50, 100
Bucket Size: 100
Cell Size:100 by 100

I take the Query point input in the form: (x, y). For K=5 i used 8 query point for plotting the graph and i found the average number of *bucket access* which are opened during the execution of knn in 2-d grid and grid files.
similarly, i used 4 different values of 'K' *i.e.* 5, 20, 50, 100 and apply the same process to find the the average number of *bucket access* which are opened during the execution of knn in 2-d grid and grid files.

0.3 Table:

8 different Query point for each K values

K = [5,20,50,100]		
Query point no.	Query point$x$	Query point y
1	371	241
2	155	364
3	297	109
4	154	162
5	395	119
6	345	151
7	191	106
8	280	249

0.4 Graph:

X-axis–value of k(5, 20, 50, 100)
Y-axis–average number of bucket access

Graph for 2-d grid and grid files for different value of K and average number of *Bucket access* using DataSet A

K = [5,20,50,100]		
KNN	2D bucket$x$	Grid Files Bucket y
5	19.25	1.875
20	21.625	2.75
50	26.625	4.625
100	34.0	7.5

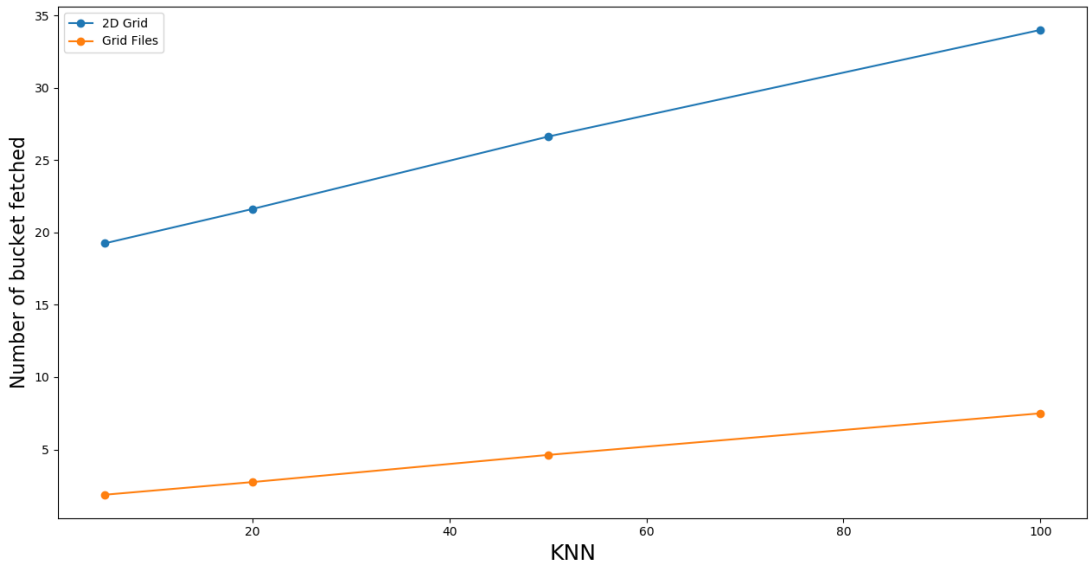

Figure1.1

Experiment 3:

Dataset to used: B
Algorithm to be compared: 2-D Grid and Grid files
K values to be used: 5, 20, 50, 100
Bucket Size: 30
Cell Size:100 by 100

I take the Query point input in the form: (x, y). For K=5 i used 8 query point for plotting the graph and i found the average number of *bucket access* which are opened during the execution of knn in 2-d grid and grid files.
similarly, i used 4 different values of 'K' *i.e.* 5, 20, 50, 100 and apply the same process to find the the average number of *bucket access* which are opened during the execution of knn in 2-d grid and grid files.

0.5 Table:

8 different Query point for each K values

K = [5,20,50,100]		
Query point no.	Query point$x$	Query point y
1	371	241
2	155	364
3	297	109
4	154	162
5	395	119
6	345	151
7	191	106
8	280	249

0.6 Graph:

X-axis–value of k(5, 20, 50, 100)
Y-axis–average number of bucket access

Graph for 2-d grid and grid files for different value of K and average number of *Bucket access* using DataSet B

K = [5,20,50,100]		
KNN	2D bucket$x$	Grid Files Bucket y
5	96.25	4.75
20	96.25	7.875
50	96.25	10.625
100	96.375	14.75

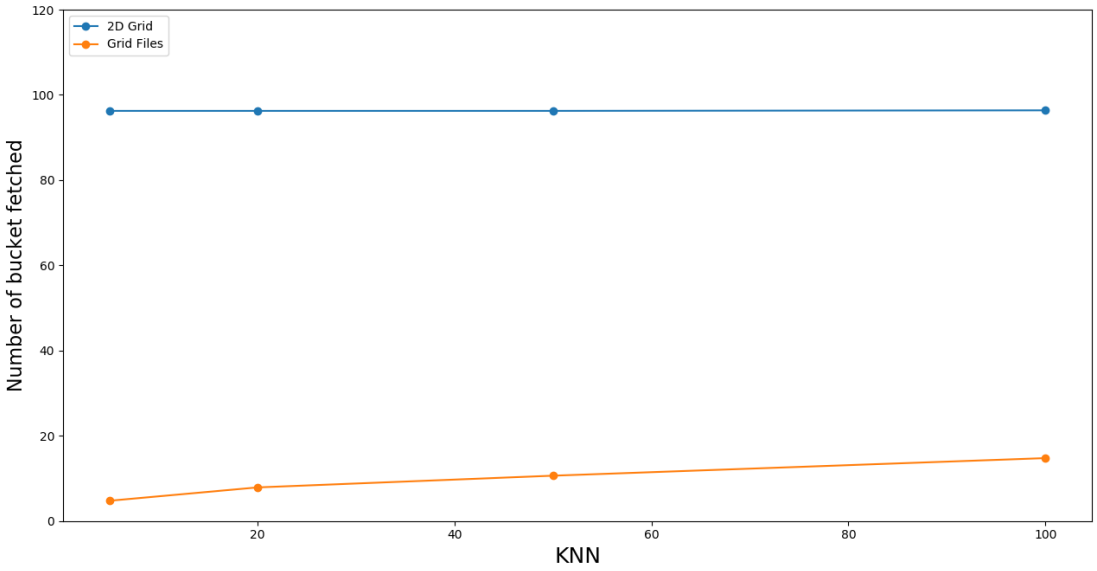

Figure1.1

Experiment 4:

Dataset to used: B
Algorithm to be compared: 2-D Grid and Grid files
K values to be used: 5, 20, 50, 100
Bucket Size: 100
Cell Size:100 by 100

I take the Query point input in the form: (x, y). For K=5 i used 8 query point for plotting the graph and i found the average number of *bucket access* which are opened during the execution of knn in 2-d grid and grid files.
similarly, i used 4 different values of 'K' *i.e.* 5, 20, 50, 100 and apply the same process to find the the average number of *bucket access* which are opened during the execution of knn in 2-d grid and grid files.

0.7 Table:

8 different Query point for each K values

0.8 Graph:

X-axis–value of k(5, 20, 50, 100)
Y-axis–average number of bucket access

Graph for 2-d grid and grid files for different value of K and average number of *Bucket access* using DataSet B

K = [5,20,50,100]		
Query point no.	Query point$x$	Query point y
1	371	241
2	155	364
3	297	109
4	154	162
5	395	119
6	345	151
7	191	106
8	280	249

K = [5,20,50,100]		
KNN	2D bucket$x$	Grid Files Bucket y
5	29.5	3.25
20	29.5	3.875
50	29.5	5.375
100	29.625	8.375

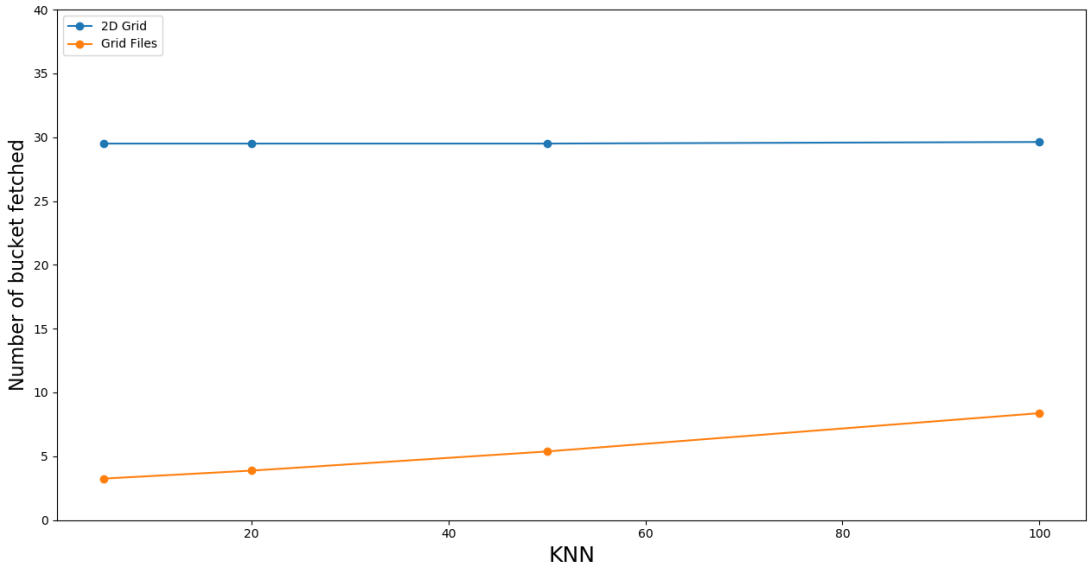

Figure1.1