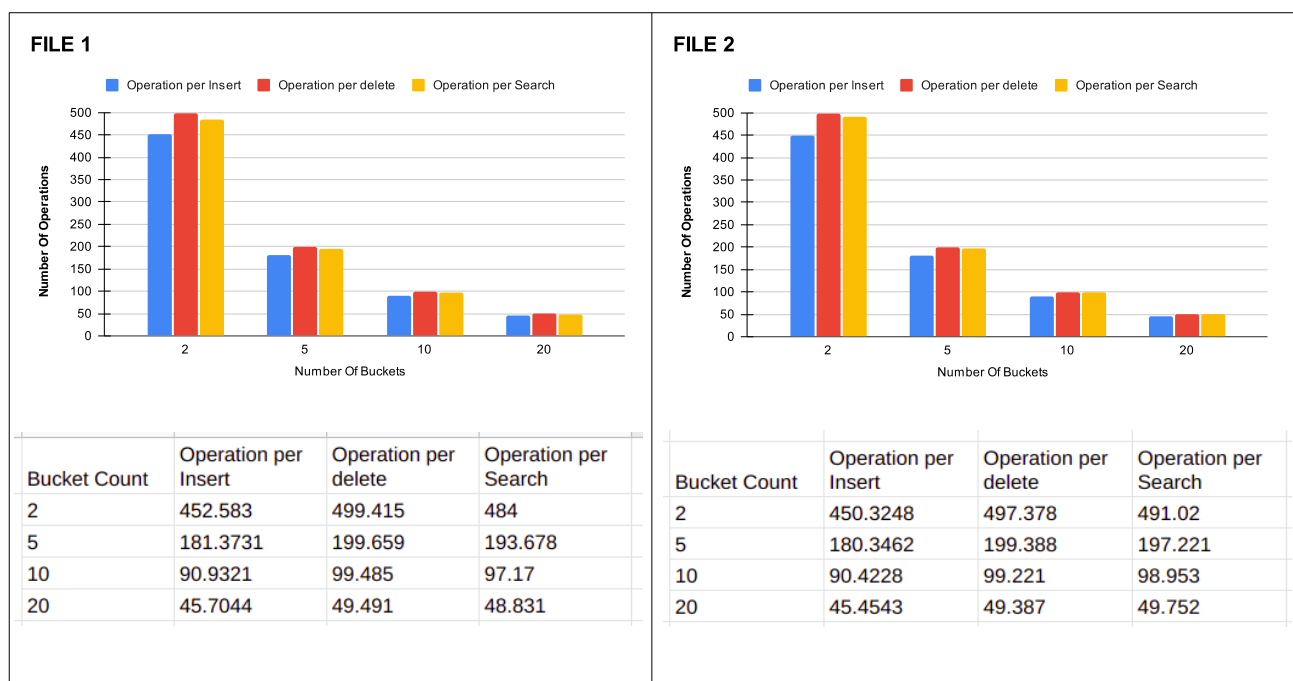


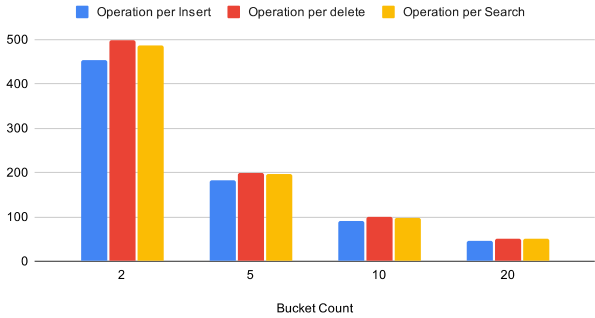
Q3 Report

The Chosen Values of a,b are 11 and 7 respectively.

As We observe in the below graphs and tables , we can conclude that the collision per bucket decrease significantly as the number of buckets increase(except in the case where the distinct elements are very less as in File 7,File 10

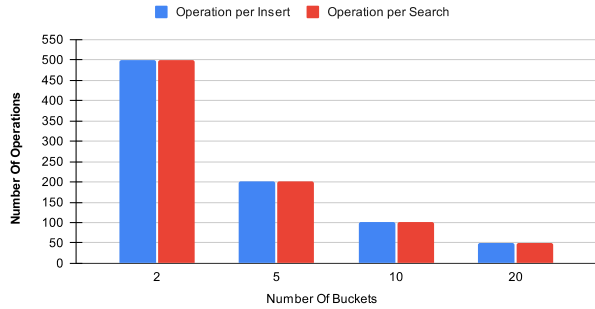


File 3



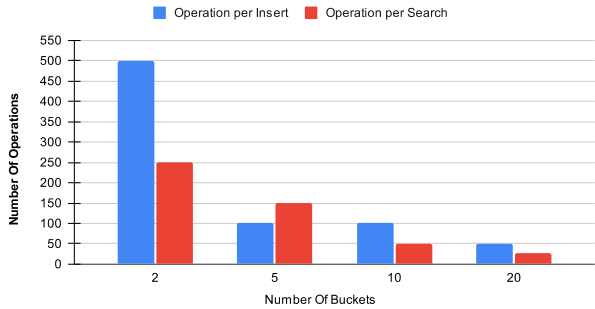
Bucket Count	Operation per Insert	Operation per delete	Operation per Search
2	452.1571	498.204	485.59
5	181.0987	199.112	194.587
10	90.8665	99.151	97.491
20	45.7247	49.236	48.89

FILE 4



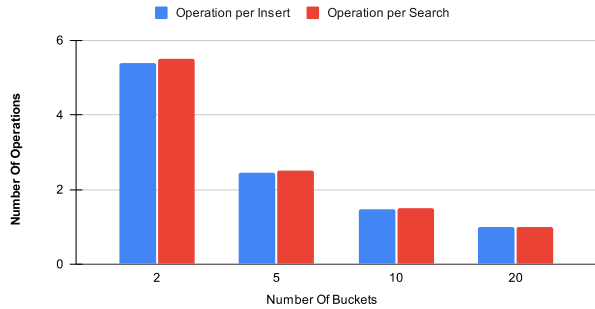
Bucket Count	Operation per Insert	Operation per delete	Operation per Search
2	500.5	-	500.5
5	200.5	-	200.5
10	100.5	-	100.5
20	50.5	-	50.5

FILE 5



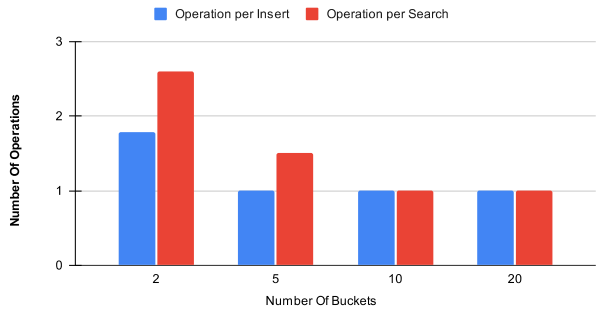
Bucket Count	Operation per Insert	Operation per delete	Operation per Search
2	500.5	-	250.75
5	100.5	-	150.75
10	100.5	-	50.75
20	50.5	-	25.75

FILE 6



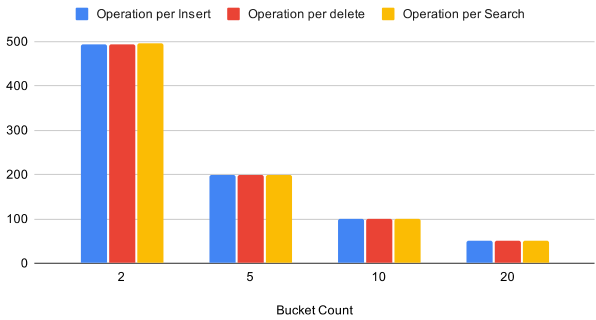
Bucket Count	Operation per Insert	Operation per delete	Operation per Search
2	5.3995	-	5.5
5	2.4635	-	2.5
10	1.482	-	1.5
20	1	-	1

FILE 7



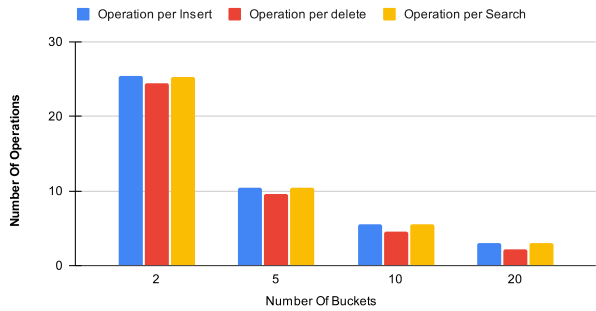
Bucket Count	Operation per Insert	Operation per delete	Operation per Search
2	1.785	-	2.6
5	1	-	1.5
10	1	-	1
20	1	-	1

File 8



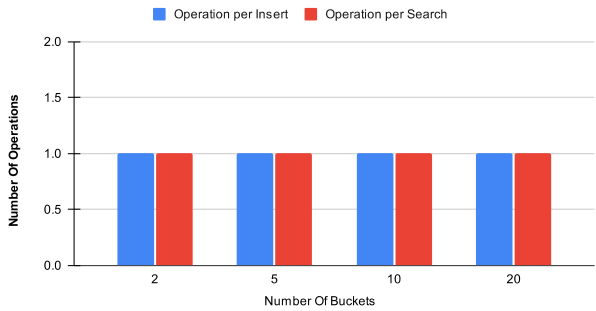
Bucket Count	Operation per Insert	Operation per delete	Operation per Search
2	494.682484	494.284265	495.870965
5	198.793344	197.965614	199.202973
10	100.17947	99.20422	100.3879
20	50.814237	49.846352	50.921609

FILE 9



Bucket Count	Operation per Insert	Operation per delete	Operation per Search
2	26.465258	25.474896	26.260476
5	11.491311	10.495834	11.42211
10	6.490006	5.493203	6.462552
20	3.992933	2.99704	3.975522

FILE 10



Bucket Count	Operation per Insert	Operation per delete	Operation per Search
2	1	-	1
5	1	-	1
10	1	-	1
20	1	-	1