

. Buffer pool size: _____16_____ GBytes

Query ID	Inputs	Optimization method	Before Optimization (ms)	After Optimization(ms)
Q1	k=10, month=1,year=2016	Create Index on month, using newtweet table	334.41298	82.13994
Q2	k=10, hashtag='NewYear',month=1,year=2016	Create Index on hashtagname	27.77298	1.08678
Q3	k=10, year=2016	Create Index on year, using newtweet table	772.47556	338.98303
Q6	k=10, hashtag= 'GOPDebate'	Unique Key Lookup on newTeet Primary and users Primary, instead of Non-Unique Key Lookup on tweet uscreen_name and hashtag Primary	331.34458	35.58724
Q10	lststate= ('AZ,Idaho,Colorado,California'), month=2, year=2016	Create index on hashtagname	248.52866	169.11446
Q15	subcat='GOP' , month=4, year=2016	Create index on sub_category	108.79356	94.04926
Q23	subcat='GOP' , lst='1,2,3' , year=2016 , k=10	Create index on sub_category	269.70194	188.336744
Q27	month1=2, month2=5, year=2016, k=10	Cant be optimized any further. I used Joins for my Before Optimization therefore I cant use joins again to make it faster. Additionally, I tried an index on tmonth column and I tried an index on tyear column but both are ignored by sql. This is because a full table scan on newtweet table is faster. Since I dont have any other attributes that I can index my Before Optimization is the fastest it can get.	90.52216	-