Buffer pool size: ___16___ GBytes

Query ID	Optimization method	Before optimization (ms)	After optimization (ms)
Q1	Change scanning both table to a left join of users no tweets	228.2	171.8
Q2	Change scanning all tables to an inner join of hashtag on tweets and inner join users on tweets	65.6	44
Q3	Change scanning all tables to an inner join of tweets on hashtag and an inner join of users on tweets.	584.4	459.6
Q6	Change scanning all tables to an inner join of tweets on u and hashtags on tweets.	65.4	43.8
Q10	Change scanning all tables to inner join of users and tweets then another inner join of hashtags and tweets	384.4	334.4
Q15	Change scanning all tables to inner tweets on url then inner join users on tweets	246.6	162.2
Q23	Change scanning all tables to inner join tweets on hashtag and inner join users on tweets	431.4	350
Q27	Change scanning all tables to inner join users on tweets	193.4	174.6