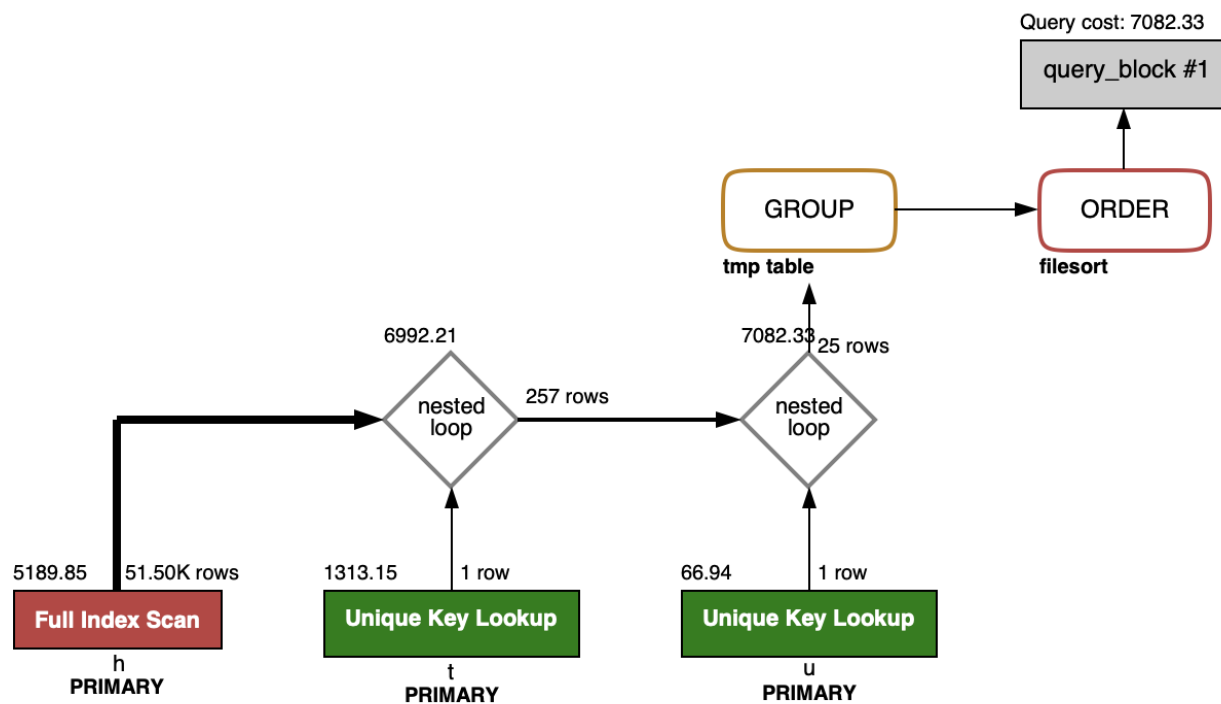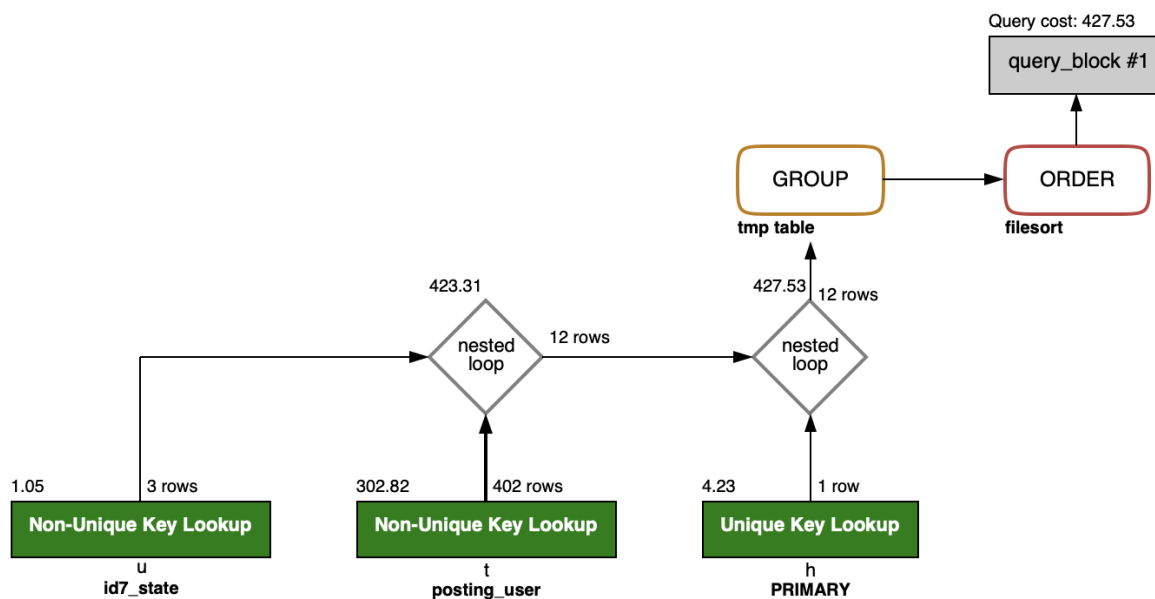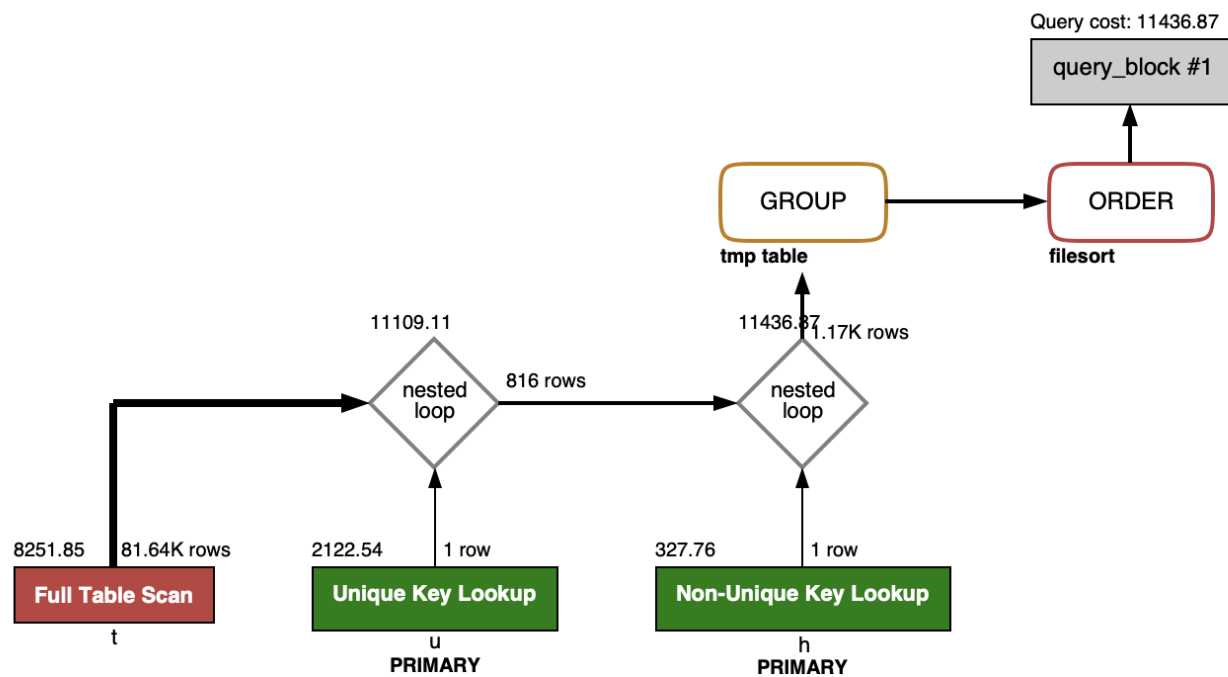| Query ID	Create index statement for each query; your execution plan needs to use the created index and reduce disk I/O cost.	Before optimization (disk I/O cost)		After optimization (disk I/O cost)	
		Run1	Run2	Run1	Run2
ID7	create index id7_state on users(state);	7082.33	7082.33	427.53	427.53
ID23	create index id21_subcat on users(subcategory);	11436.87	11436.87	7697.36	7697.36

Query 1 before:

Query 1 after:

Query 2 before:

Query cost: 11436.87

query_block #1

GROUP
tmp table

ORDER
filesort

11109.11

nested
loop

816 rows

11436.87 1.17K rows

nested
loop

8251.85   81.64K rows

Full Table Scan

t

2122.54   1 row

Unique Key Lookup

u
PRIMARY

327.76   1 row

Non-Unique Key Lookup

h
PRIMARY

Query 2 after:

Query cost: 7697.36

query_block #1

GROUP
tmp table

ORDER
filesort

6906.22

nested
loop

1.97K rows

7697.36 2.82K rows

nested
loop

9.39   49 rows

Non-Unique Key Lookup

u
id21_subcat

5123.360000000002   402 rows

Non-Unique Key Lookup

t
posting_user

791.15   1 row

Non-Unique Key Lookup

h
PRIMARY