

Indexes were added to room\_type and room\_size and a cover index to (building\_LID, room\_num)

room\_type being indexed helped specifically when searching rooms by type and size:

- Execution time decreased from 0.304..0.371 to 0.099..0.143 in the nested join as well as a decreased estimated cost
- Scanned rows went from 220 to 16 total
- Actual results went from (actual time=0.0861..0.245 rows=220 loops=1) to (actual time=0.0847..0.0922 rows=16 loops=1)
- Overall, the improvements were 13.75 times more efficient in the scanning of rows, and around 62.4% faster for the entire table to be shown

room\_size being indexed helps with smaller queries, this example shows only 2 rows being returned, but without indexing, the entire table would have to be scanned:

- Execution time decreased from 0.353..0.363 to 0.0678..0.0728 in the nested join as well as a decreased estimated cost
- Scanned rows went from 220 to 2 total
- Actual results went from (actual time=0.0926..0.271 rows=220 loops=1) to (actual time=0.0458..0.0481 rows=2 loops=1)
- Overall, the improvements were 110 times more efficient in the scanning of rows, and around 82.3% faster for the entire table to be shown