1. **CREATE INDEX product\_in\_cart\_prod\_id ON products\_in\_cart(product\_id)**

This index shortened run time of the most amount of queries. Further, for parameters, 5000 customers, 2500 categories, 100,000 products, and 200,000 sales,

this reduced the runtime of Query 7(which takes the longest time) from 28 secs to 22 secs. Other indices, although faster than non indexing, returned the same query in longer time than this index.