2b_explainations.md 1/16/2023

For speeding up this query we sould create a index in ascending order on the column last_name of the table customer:

```
CREATE INDEX last_name ON customer (last_names ASC);
```

Original

```
Sort (cost=42.62..44.12 rows=599 width=17)
    Sort Key: last_name
    -> Seq Scan on customer (cost=0.00..14.99 rows=599 width=17)
(3 rows)
Time: 1.717 ms
```

With Index

```
Sort (cost=42.62..44.12 rows=599 width=17)
    Sort Key: last_name
    -> Seq Scan on customer (cost=0.00..14.99 rows=599 width=17)
(3 rows)
Time: 1.355 ms
```

The Index is not used, because the dataset is to small. If the dataset would be bigger, the index would be used.