Normal query is 90ms New faster query without index is 7ms.

Normal:

```
GroupAggregate  (cost=193423.12..193451.71 rows=128 width=21)
   Group Key: actor.first_name, actor.last_name
   ->  Sort  (cost=193423.12..193429.95 rows=2731 width=15)
         Sort Key: actor.first_name, actor.last_name
         ->  Nested Loop  (cost=0.28..193267.25 rows=2731 width=15)
               ->  Seq Scan on actor  (cost=0.00..4.00 rows=200 width=17)
               ->  Index Only Scan using film_actor_pkey on film_actor
(cost=0.28..966.18 rows=14 width=4)
                     Index Cond: (actor_id = actor.actor_id)
                     Filter: (SubPlan 1)
                     SubPlan 1
                       ->  Materialize  (cost=0.00..70.16 rows=531
width=4)
                             ->  Seq Scan on film  (cost=0.00..67.50
rows=531 width=4)
                                   Filter: (length < 120)
```

The old query does first evaluate all films that have a length of less than 120 minutes, and checks afterwards for every film if it is contained in the cached list. This results in a nested loop. The outer loop must wait for the inner loop to finish.
Therefore the old query takes $O(n^2)$ time to look for which films should be included.

```
faster:
 Sort  (cost=210.72..211.04 rows=128 width=21)
   Sort Key: actor.first_name, actor.last_name
   ->  HashAggregate  (cost=204.96..206.24 rows=128 width=21)
         Group Key: actor.first_name, actor.last_name
         ->  Hash Join  (cost=79.86..185.75 rows=2562 width=17)
               Hash Cond: (film_actor.actor_id = actor.actor_id)
               ->  Hash Join  (cost=73.36..172.38 rows=2562 width=6)
                     Hash Cond: (film_actor.film_id = film.film_id)
                     ->  Seq Scan on film_actor  (cost=0.00..84.62
rows=5462 width=4)
                     ->  Hash  (cost=67.50..67.50 rows=469 width=4)
                           ->  Seq Scan on film  (cost=0.00..67.50
rows=469 width=4)
                                 Filter: (length >= 120)
               ->  Hash  (cost=4.00..4.00 rows=200 width=17)
                     ->  Seq Scan on actor  (cost=0.00..4.00 rows=200
width=17)
```

The edited query is faster, because it will only take the films with the length >= 120 minutes. The new query only takes O(n) to accomplish the same task.