## Question 1:

category	average_length	
Action	111.6094	
Animation	111.0152	
Children	109.8000	
Classics	111.6667	
Comedy	115.8276	
Documentary	108.7500	
Drama	120.8387	
Family	114.7826	
Foreign	121.6986	
Games	127.8361	
Horror	112.4821	
Music	113.6471	
New	111.1270	
Sci-Fi	108.1967	
Sports	128.2027	
Travel	113.3158	

Question 2:

category		
Sci-Fi	108.1967	
Sports	128.2027	

Question 3:

```
SELECT c.customer_id, c.first_name, c.last_name
  FROM customer c
  WHERE EXISTS (
      SELECT 1
      FROM rental r
      JOIN inventory i ON r.inventory_id = i.inventory_id
      JOIN film f ON i.film_id = f.film_id
      JOIN film_category fc ON f.film_id = fc.film_id
      JOIN category cat ON fc.category_id = cat.category_id
      WHERE r.customer_id = c.customer_id
      AND cat.name = 'Action'
SELECT 1
      FROM rental r
      JOIN inventory i ON r.inventory_id = i.inventory_id
      JOIN film f ON i.film_id = f.film_id
      JOIN film_category fc ON f.film_id = fc.film_id
      JOIN category cat ON fc.category_id = cat.category_id
      WHERE r.customer_id = c.customer_id
      AND cat.name IN ('Comedy', 'Classic')
```

2	PATRICIA	JOHNSON	
8	SUSAN	WILSON	
11	LISA	ANDERSON	
17	DONNA	THOMPSON	
43	CHRISTINE	ROBERTS	
49	JOYCE	EDWARDS	
60	MILDRED	BAILEY	
69	JUDY	GRAY	
71	KATHY	JAMES	
73	BEVERLY	BROOKS	
83	LOUISE	JENKINS	
90	RUBY	WASHING	
111	CARMEN	OWENS	
115	WENDY	HARRISON	
123	SHANNON	FREEMAN	
124	SHEILA	WELLS	
126	ELLEN	SIMPSON	
136	ANITA	MORALES	
139	AMBER	DIXON	
142	APRIL	BURNS	
164	JOANN	GARDNER	
171	DOLORES	WAGNER	
178	MARION	SNYDER	
183	IDA	ANDREWS	
185	ROBERTA	HARPER	
203	TARA	RYAN	
212	WILMA	RICHARDS	
010	CINIA	WILL TV MG	

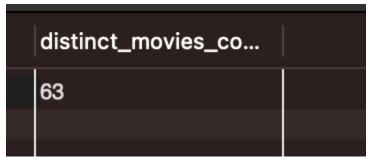
Question 4:

```
SELECT a.actor_id, a.first_name, a.last_name, COUNT(*) AS movie_count
FROM actor a
JOIN film_actor fa ON a.actor_id = fa.actor_id
JOIN film f ON fa.film_id = f.film_id
JOIN language l ON f.language_id = l.language_id
WHERE l.name = 'English'
GROUP BY a.actor_id, a.first_name, a.last_name
ORDER BY movie_count DESC
LIMIT 1;
```

actor_id	first_name	last_name	movie_count	
107	GINA	DEGENERES	42	

## Question 5:

```
SELECT COUNT(DISTINCT r.inventory_id) AS distinct_movies_count
FROM rental r
JOIN inventory i ON r.inventory_id = i.inventory_id
JOIN store s ON i.store_id = s.store_id
JOIN staff st ON s.store_id = st.store_id
WHERE st.first_name = 'Mike'
AND DATEDIFF(r.return_date, r.rental_date) = 10;
```



Question 6:

```
-- Find the film_id of the movie with the largest cast

SELECT film_id

FROM film_actor

GROUP BY film_id

ORDER BY COUNT(actor_id) DESC

LIMIT 1;

-- List actors who appeared in the movie with the largest cast

SELECT a.actor_id, a.first_name, a.last_name

FROM actor a

JOIN film_actor fa ON a.actor_id = fa.actor_id

WHERE fa.film_id = 508

ORDER BY a.last_name;
```

actor_id	first_name	last_name	
47	JULIA	BARRYMORE	
37	VAL	BOLGER	
81	SCARLETT	DAMON	
138	LUCILLE	DEE	
28	WOODY	HOFFMAN	
170	MENA	HOPPER	
45	REESE	KILMER	
61	CHRISTIAN	NEESON	
150	JAYNE	NOLTE	
75	BURT	POSEY	
53	MENA	TEMPLE	
102	WALTER	TORN	
147	FAY	WINSLET	
111	CAMERON	ZELLWEGER	
186	JULIA	ZELLWEGER	