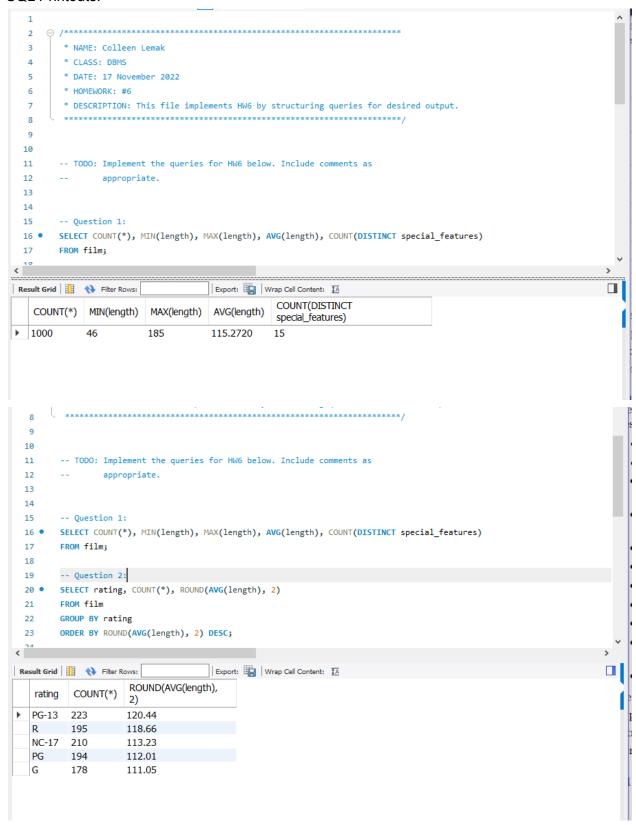
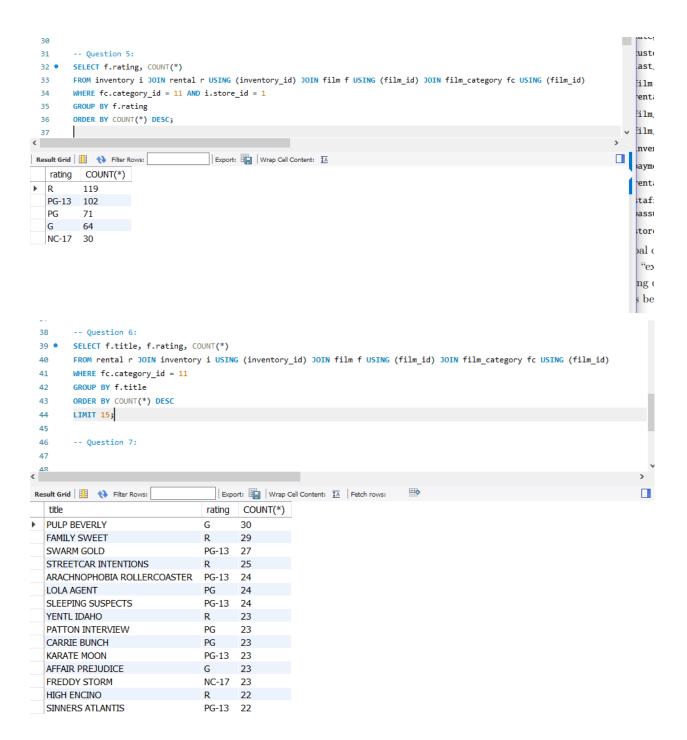
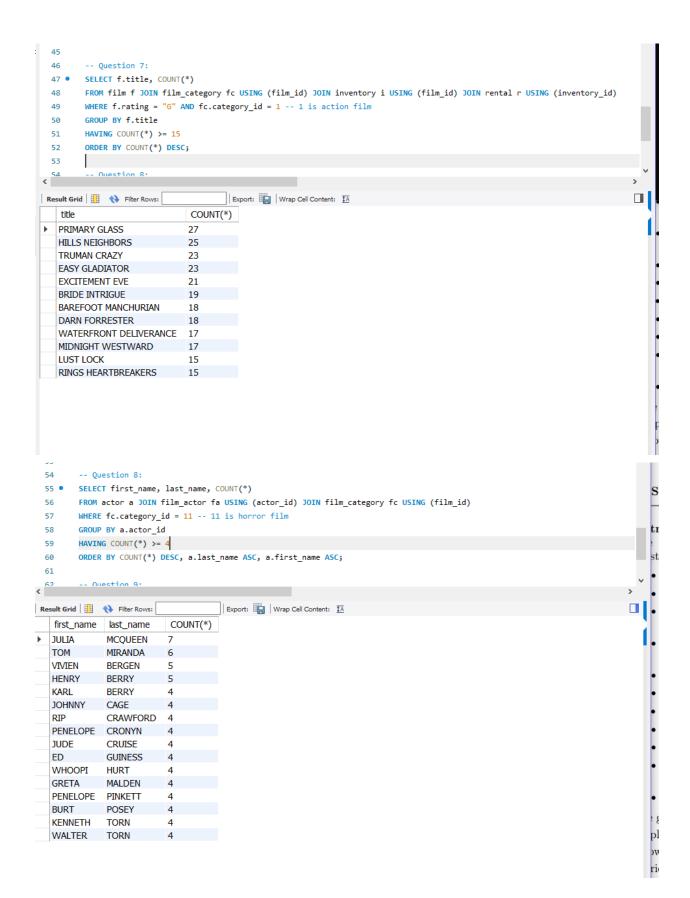
DBMS HW #6 Write-Up

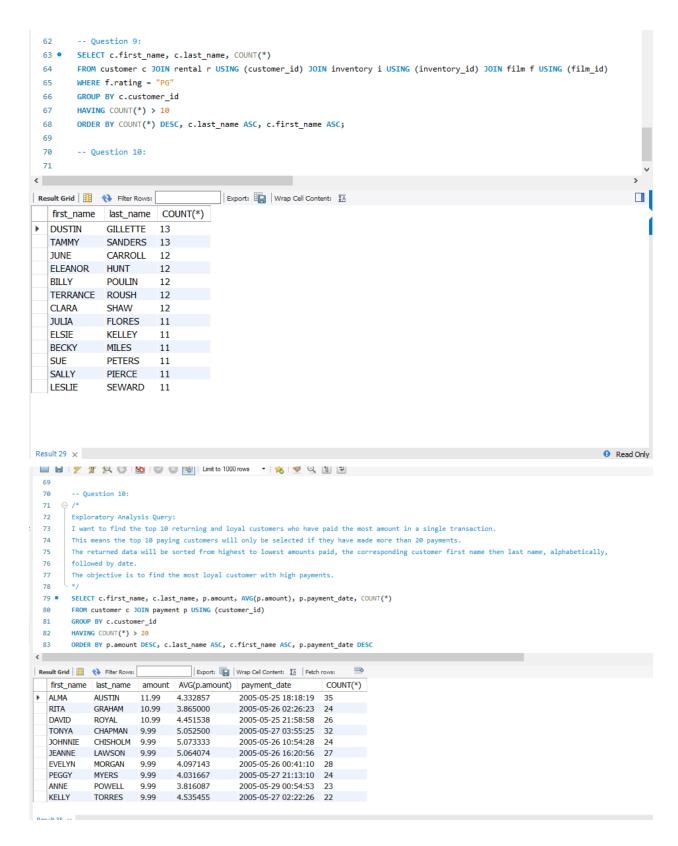
SQL Printouts:



```
19
         -- Question 2:
 20 •
         SELECT rating, COUNT(*), ROUND(AVG(length), 2)
 21
 22
         GROUP BY rating
 23
         ORDER BY ROUND(AVG(length), 2) DESC;
 24
 25
         -- Question 3:
 26 •
         SELECT rating, COUNT(*)
         FROM actor JOIN film_actor USING (actor_id) JOIN film USING (film_id)
 27
         GROUP BY rating
 28
         ORDER BY COUNT(*) DESC;
 29
 30
 31
 32
         -- Ouestion 4:
Export: Wrap Cell Content: ‡Ā
                                                                                                                                     rating
           COUNT(*)
  PG-13
           1184
   PG
           1143
  NC-17 1128
  R
           1031
  G
           976
 26
       -- Question 4:
       SELECT c.name, COUNT(*), MIN(rental_rate), MAX(rental_rate), ROUND(AVG(rental_rate), 2), MIN(replacement_cost), MAX(replacement_cost), ROUND
       FROM category c JOIN film_category fc USING (category_id) JOIN film f USING (film_id)
 29
       GROUP BY c.name ASC;
 30
       -- Ouestion 5:
                                                                                                                                      Export: Wrap Cell Content: IA
                                                          ROUND(AVG(rental_rate),
                                                                                                                             ROUND(AVG(re
                                                                                  MIN(replacement_cost) MAX(replacement_cost)
   name
                COUNT(*) MIN(rental_rate) MAX(rental_rate)
                                                         2)
                                                                                                                             2)
Action
                          0.99
                                                         2.65
                                                                                  9 99
                                                                                                       29.99
                                         4.99
                                                                                                                            20.91
  Animation
                          0.99
                                         4.99
                                                         2.81
                                                                                  9.99
                                                                                                       29.99
                                                                                                                            20.13
                                                         2.89
                                                                                                                            20.06
  Children
                60
                          0.99
                                         4.99
                                                                                                       29.99
                                                                                  9.99
  Classics
               57
                          0.99
                                         4.99
                                                         2.74
                                                                                  10.99
                                                                                                       29.99
                                                                                                                            21.01
  Comedy
                58
                          0.99
                                         4.99
                                                         3.16
                                                                                  9.99
                                                                                                       28.99
                                                                                                                            19.02
               68
                          0.99
                                         4.99
                                                         2.67
                                                                                  9.99
                                                                                                       29.99
                                                                                                                            19.62
  Documentary
  Drama
                62
                          0.99
                                         4.99
                                                         3.02
                                                                                  9.99
                                                                                                       29.99
                                                                                                                            21.09
  Family
                69
                          0.99
                                         4.99
                                                         2.76
                                                                                  9.99
                                                                                                       29.99
                                                                                                                            19.73
                                         4.99
                                                         3.10
                73
                          0.99
  Foreign
                                                                                  9.99
                                                                                                       29.99
                                                                                                                            18.65
  Games
               61
                          0.99
                                         4.99
                                                         3.25
                                                                                  9.99
                                                                                                       29.99
                                                                                                                            20.29
                                         4.99
                                                         3.03
                                                                                                                            19.87
  Horror
                56
                          0.99
                                                                                  10.99
                                                                                                       29.99
  Music
               51
                          0.99
                                         4.99
                                                         2.95
                                                                                  10.99
                                                                                                       29.99
                                                                                                                            19.44
  New
                63
                          0.99
                                         4.99
                                                         3.12
                                                                                  9.99
                                                                                                       29.99
                                                                                                                            19.42
  Sci-Fi
                          0.99
                                         4.99
                                                         3.22
                                                                                  9.99
                                                                                                       29.99
                                                                                                                            21.15
               61
  Sports
                74
                          0.99
                                         4.99
                                                         3.13
                                                                                  9.99
                                                                                                       29.99
                                                                                                                            20.40
  Travel
               57
                          0.99
                                         4.99
                                                         3.24
                                                                                  9.99
                                                                                                       29.99
                                                                                                                            19.03
```







Question 10 Explanation:

I find this query interesting because we are able to group on customer id, meaning we can count up all of that customer's payments, and investigate who is most important to the company financially, for example. Reporting the top 10 most engaged customers (via payments) is important because you want to understand who is paying the most, especially if their payments are frequent. Perhaps we want to reward the top 10 customers with bonuses to encourage their return. Averaging their payment amount, especially if applied to a very large database can provide insight into which customers are most active.