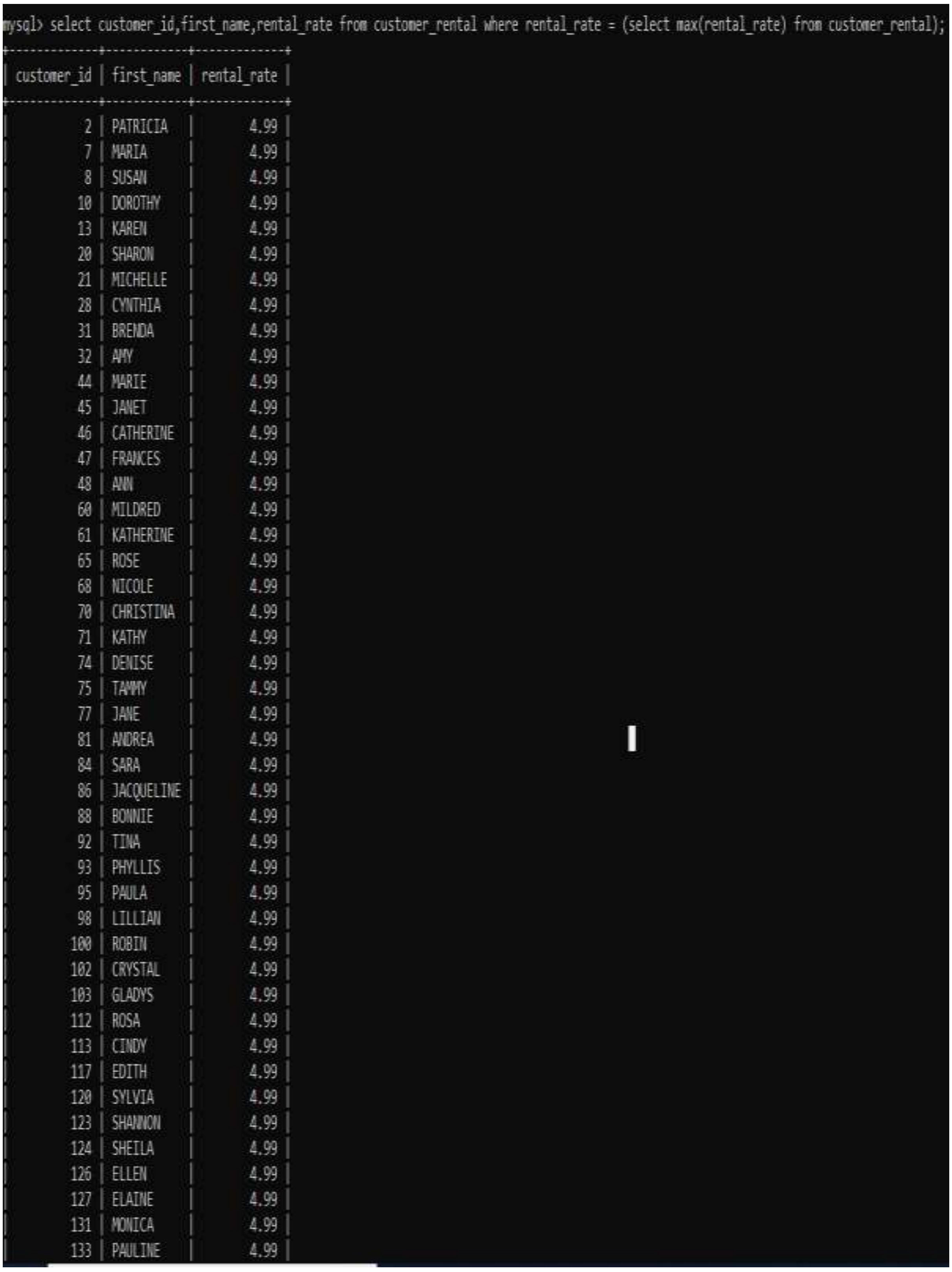
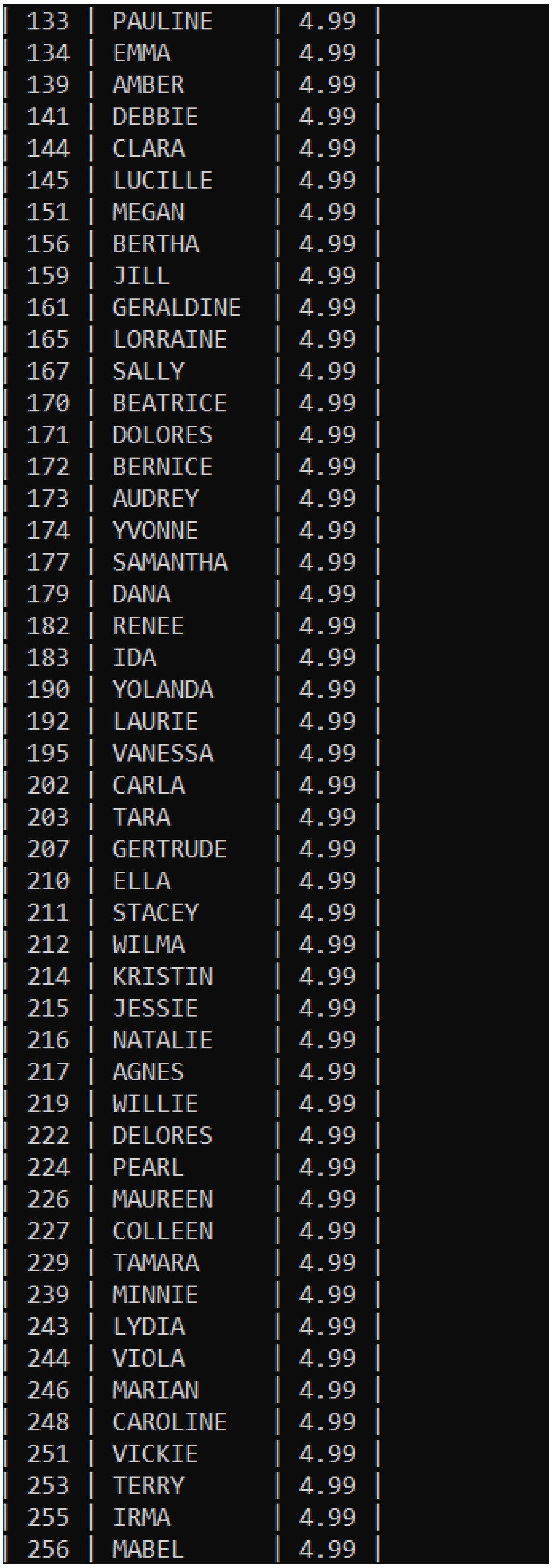
27.2

1. Who is the customer who spent the most on rental movies?
Return his/her customer id, first name and the amount spent.

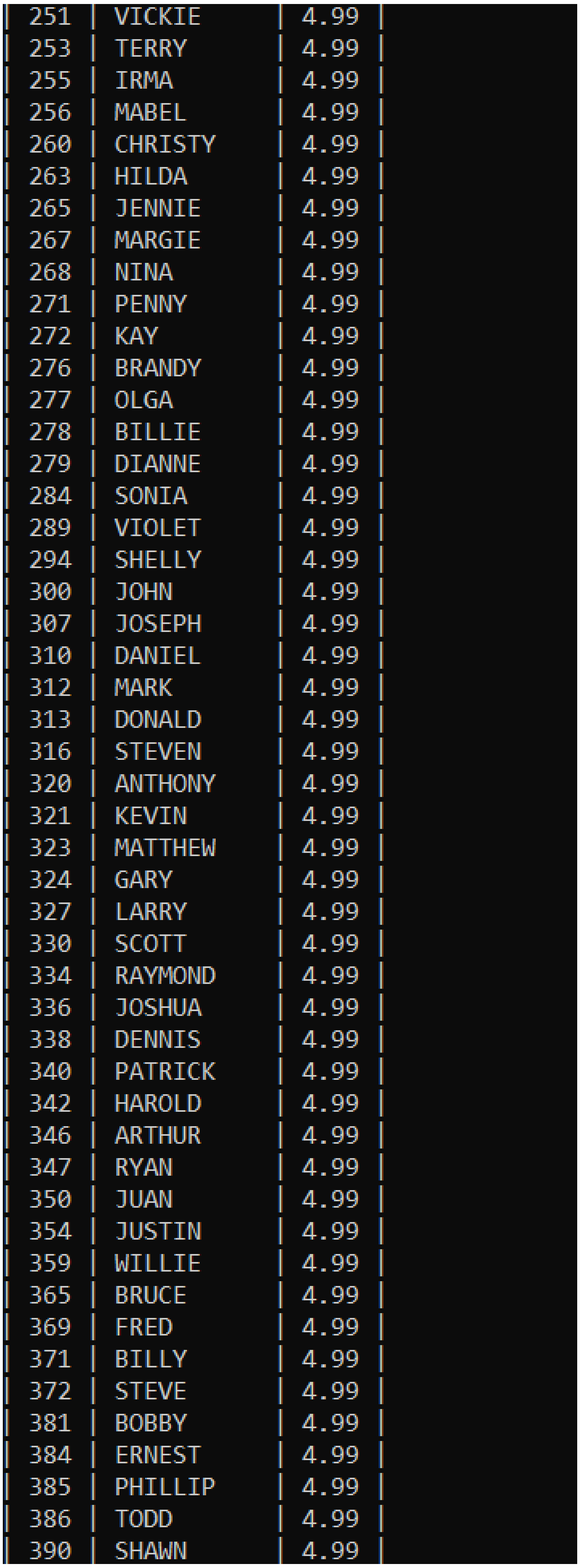
Most on rental movies = max rental rate. Amount spent = rental rate



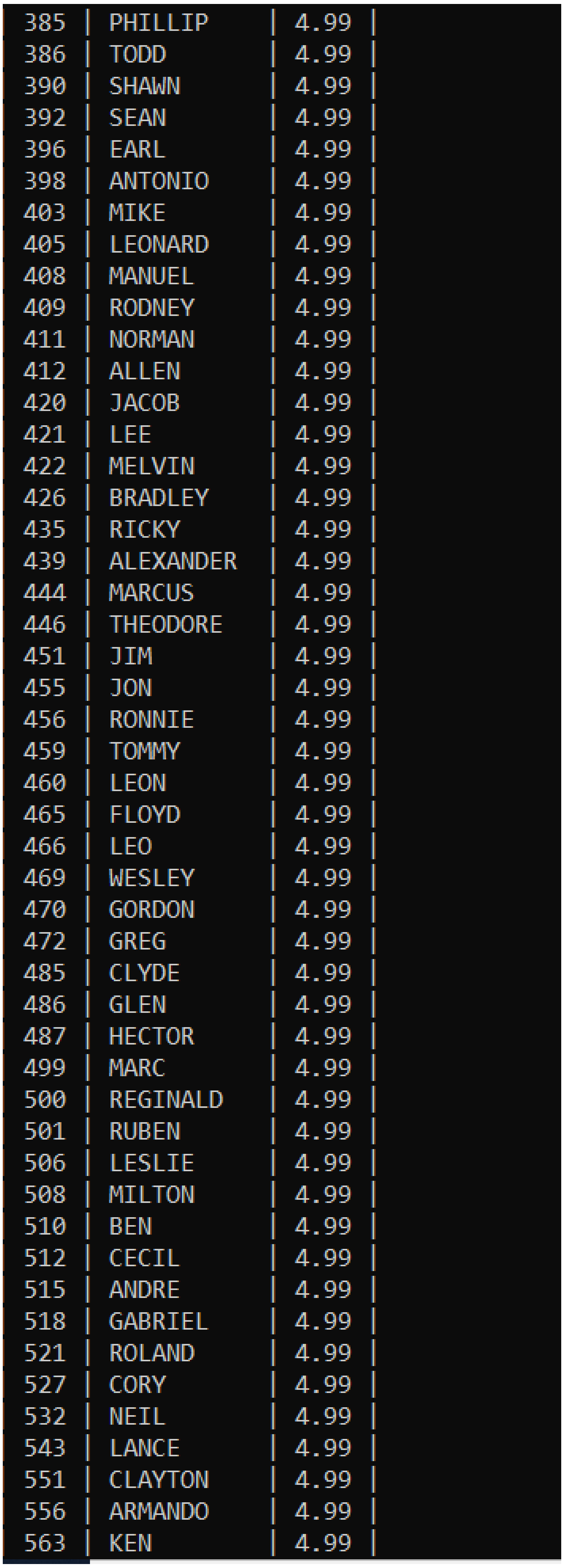
```
mysql> select customer_id,first_name,rental_rate from customer_rental where rental_rate = (select max(rental_rate) from customer_rental);
+-------------+------------+-------------+
| customer_id | first_name | rental_rate |
+-------------+------------+-------------+
|           2 | PATRICIA   |        4.99 |
|           7 | MARIA      |        4.99 |
|           8 | SUSAN      |        4.99 |
|          10 | DOROTHY    |        4.99 |
|          13 | KAREN      |        4.99 |
|          20 | SHARON     |        4.99 |
|          21 | MICHELLE   |        4.99 |
|          28 | CYNTHIA    |        4.99 |
|          31 | BRENDA     |        4.99 |
|          32 | AMY        |        4.99 |
|          44 | MARIE      |        4.99 |
|          45 | JANET      |        4.99 |
|          46 | CATHERINE  |        4.99 |
|          47 | FRANCES    |        4.99 |
|          48 | ANN        |        4.99 |
|          60 | MILDRED    |        4.99 |
|          61 | KATHERINE  |        4.99 |
|          65 | ROSE       |        4.99 |
|          68 | NICOLE     |        4.99 |
|          70 | CHRISTINA  |        4.99 |
|          71 | KATHY      |        4.99 |
|          74 | DENISE     |        4.99 |
|          75 | TAMMY      |        4.99 |
|          77 | JANE       |        4.99 |
|          81 | ANDREA     |        4.99 |
|          84 | SARA       |        4.99 |
|          86 | JACQUELINE |        4.99 |
|          88 | BONNIE     |        4.99 |
|          92 | TINA       |        4.99 |
|          93 | PHYLLIS    |        4.99 |
|          95 | PAULA      |        4.99 |
|          98 | LILLIAN    |        4.99 |
|         100 | ROBIN      |        4.99 |
|         102 | CRYSTAL    |        4.99 |
|         103 | GLADYS     |        4.99 |
|         112 | ROSA       |        4.99 |
|         113 | CINDY      |        4.99 |
|         117 | EDITH      |        4.99 |
|         120 | SYLVIA     |        4.99 |
|         123 | SHANNON    |        4.99 |
|         124 | SHEILA     |        4.99 |
|         126 | ELLEN      |        4.99 |
|         127 | ELAINE     |        4.99 |
|         131 | MONICA     |        4.99 |
|         133 | PAULINE    |        4.99 |
```



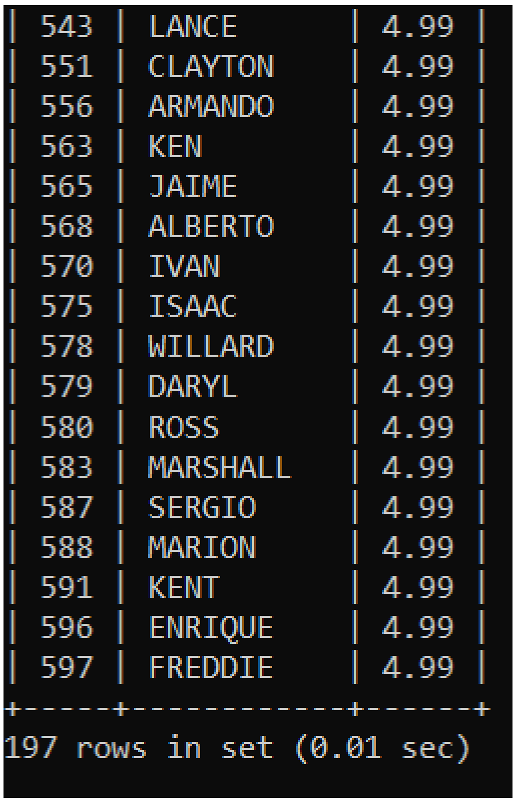
```
|  133 | PAULINE     |  4.99 |
|  134 | EMMA        |  4.99 |
|  139 | AMBER       |  4.99 |
|  141 | DEBBIE      |  4.99 |
|  144 | CLARA       |  4.99 |
|  145 | LUCILLE     |  4.99 |
|  151 | MEGAN       |  4.99 |
|  156 | BERTHA      |  4.99 |
|  159 | JILL        |  4.99 |
|  161 | GERALDINE   |  4.99 |
|  165 | LORRAINE    |  4.99 |
|  167 | SALLY       |  4.99 |
|  170 | BEATRICE    |  4.99 |
|  171 | DOLORES     |  4.99 |
|  172 | BERNICE     |  4.99 |
|  173 | AUDREY      |  4.99 |
|  174 | YVONNE      |  4.99 |
|  177 | SAMANTHA    |  4.99 |
|  179 | DANA        |  4.99 |
|  182 | RENEE       |  4.99 |
|  183 | IDA         |  4.99 |
|  190 | YOLANDA     |  4.99 |
|  192 | LAURIE      |  4.99 |
|  195 | VANESSA     |  4.99 |
|  202 | CARLA       |  4.99 |
|  203 | TARA        |  4.99 |
|  207 | GERTRUDE    |  4.99 |
|  210 | ELLA        |  4.99 |
|  211 | STACEY      |  4.99 |
|  212 | WILMA       |  4.99 |
|  214 | KRISTIN     |  4.99 |
|  215 | JESSIE      |  4.99 |
|  216 | NATALIE     |  4.99 |
|  217 | AGNES       |  4.99 |
|  219 | WILLIE      |  4.99 |
|  222 | DELORES     |  4.99 |
|  224 | PEARL       |  4.99 |
|  226 | MAUREEN     |  4.99 |
|  227 | COLLEEN     |  4.99 |
|  229 | TAMARA      |  4.99 |
|  239 | MINNIE      |  4.99 |
|  243 | LYDIA       |  4.99 |
|  244 | VIOLA       |  4.99 |
|  246 | MARIAN      |  4.99 |
|  248 | CAROLINE    |  4.99 |
|  251 | VICKIE      |  4.99 |
|  253 | TERRY       |  4.99 |
|  255 | IRMA        |  4.99 |
|  256 | MABEL       |  4.99 |
```



```
| 251 | VICKIE      | 4.99 |
| 253 | TERRY       | 4.99 |
| 255 | IRMA        | 4.99 |
| 256 | MABEL       | 4.99 |
| 260 | CHRISTY     | 4.99 |
| 263 | HILDA       | 4.99 |
| 265 | JENNIE      | 4.99 |
| 267 | MARGIE      | 4.99 |
| 268 | NINA        | 4.99 |
| 271 | PENNY       | 4.99 |
| 272 | KAY         | 4.99 |
| 276 | BRANDY      | 4.99 |
| 277 | OLGA        | 4.99 |
| 278 | BILLIE      | 4.99 |
| 279 | DIANNE      | 4.99 |
| 284 | SONIA       | 4.99 |
| 289 | VIOLET      | 4.99 |
| 294 | SHELLY      | 4.99 |
| 300 | JOHN        | 4.99 |
| 307 | JOSEPH      | 4.99 |
| 310 | DANIEL      | 4.99 |
| 312 | MARK        | 4.99 |
| 313 | DONALD      | 4.99 |
| 316 | STEVEN      | 4.99 |
| 320 | ANTHONY     | 4.99 |
| 321 | KEVIN       | 4.99 |
| 323 | MATTHEW     | 4.99 |
| 324 | GARY        | 4.99 |
| 327 | LARRY       | 4.99 |
| 330 | SCOTT       | 4.99 |
| 334 | RAYMOND     | 4.99 |
| 336 | JOSHUA      | 4.99 |
| 338 | DENNIS      | 4.99 |
| 340 | PATRICK     | 4.99 |
| 342 | HAROLD      | 4.99 |
| 346 | ARTHUR      | 4.99 |
| 347 | RYAN        | 4.99 |
| 350 | JUAN        | 4.99 |
| 354 | JUSTIN      | 4.99 |
| 359 | WILLIE      | 4.99 |
| 365 | BRUCE       | 4.99 |
| 369 | FRED        | 4.99 |
| 371 | BILLY       | 4.99 |
| 372 | STEVE       | 4.99 |
| 381 | BOBBY       | 4.99 |
| 384 | ERNEST      | 4.99 |
| 385 | PHILLIP     | 4.99 |
| 386 | TODD        | 4.99 |
| 390 | SHAWN       | 4.99 |
```

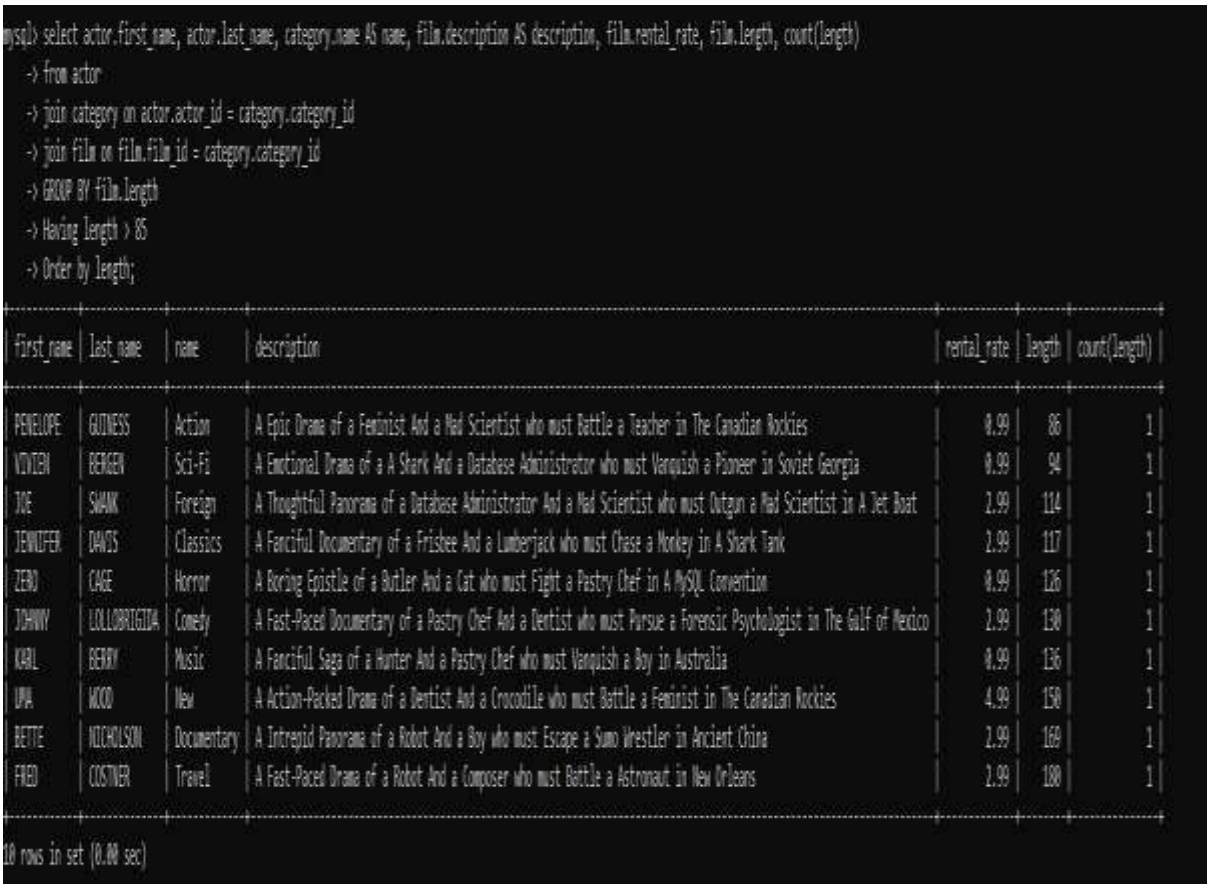


```
 385 | PHILLIP     | 4.99 |
 386 | TODD        | 4.99 |
 390 | SHAWN       | 4.99 |
 392 | SEAN        | 4.99 |
 396 | EARL        | 4.99 |
 398 | ANTONIO     | 4.99 |
 403 | MIKE        | 4.99 |
 405 | LEONARD     | 4.99 |
 408 | MANUEL      | 4.99 |
 409 | RODNEY      | 4.99 |
 411 | NORMAN      | 4.99 |
 412 | ALLEN       | 4.99 |
 420 | JACOB       | 4.99 |
 421 | LEE         | 4.99 |
 422 | MELVIN      | 4.99 |
 426 | BRADLEY     | 4.99 |
 435 | RICKY       | 4.99 |
 439 | ALEXANDER   | 4.99 |
 444 | MARCUS      | 4.99 |
 446 | THEODORE    | 4.99 |
 451 | JIM         | 4.99 |
 455 | JON         | 4.99 |
 456 | RONNIE      | 4.99 |
 459 | TOMMY       | 4.99 |
 460 | LEON        | 4.99 |
 465 | FLOYD       | 4.99 |
 466 | LEO         | 4.99 |
 469 | WESLEY      | 4.99 |
 470 | GORDON      | 4.99 |
 472 | GREG        | 4.99 |
 485 | CLYDE       | 4.99 |
 486 | GLEN        | 4.99 |
 487 | HECTOR      | 4.99 |
 499 | MARC        | 4.99 |
 500 | REGINALD    | 4.99 |
 501 | RUBEN       | 4.99 |
 506 | LESLIE      | 4.99 |
 508 | MILTON      | 4.99 |
 510 | BEN         | 4.99 |
 512 | CECIL       | 4.99 |
 515 | ANDRE       | 4.99 |
 518 | GABRIEL     | 4.99 |
 521 | ROLAND      | 4.99 |
 527 | CORY        | 4.99 |
 532 | NEIL        | 4.99 |
 543 | LANCE       | 4.99 |
 551 | CLAYTON     | 4.99 |
 556 | ARMANDO     | 4.99 |
 563 | KEN         | 4.99 |
```



```
| 543 | LANCE       | 4.99 |
| 551 | CLAYTON     | 4.99 |
| 556 | ARMANDO     | 4.99 |
| 563 | KEN         | 4.99 |
| 565 | JAIME       | 4.99 |
| 568 | ALBERTO     | 4.99 |
| 570 | IVAN        | 4.99 |
| 575 | ISAAC       | 4.99 |
| 578 | WILLARD     | 4.99 |
| 579 | DARYL       | 4.99 |
| 580 | ROSS        | 4.99 |
| 583 | MARSHALL    | 4.99 |
| 587 | SERGIO      | 4.99 |
| 588 | MARION      | 4.99 |
| 591 | KENT        | 4.99 |
| 596 | ENRIQUE     | 4.99 |
| 597 | FREDDIE     | 4.99 |
+-----+-------------+------+
197 rows in set (0.01 sec)
```

2. Give an interesting query of your own that is not already in the assignment. The query should involve at least two joins, HAVING clause and aggregation operation. Give the answer.



```
ysql> select actor.first_name, actor.last_name, category.name AS name, film.description AS description, film.rental_rate, film.length, count(length)
    -> from actor
    -> join category on actor.actor_id = category.category_id
    -> join film on film.film_id = category.category_id
    -> GROUP BY film.length
    -> Having length > 85
    -> Order by length;
+------------+--------------+-------------+------------------------------------------------------------------------------------------------------+-------------+--------+---------------+
| first_name | last_name    | name        | description                                                                                          | rental_rate | length | count(length) |
+------------+--------------+-------------+------------------------------------------------------------------------------------------------------+-------------+--------+---------------+
| PENELOPE   | GUINESS      | Action      | A Epic Drama of a Feminist And a Mad Scientist who must Battle a Teacher in The Canadian Rockies     |        0.99 |     86 |             1 |
| VIVIEN     | BERGEN       | Sci-Fi      | A Emotional Drama of a A Shark And a Database Administrator who must Vanquish a Pioneer in Soviet Georgia |   0.99 |     94 |             1 |
| JOE        | SWANK        | Foreign     | A Thoughtful Panorama of a Database Administrator And a Mad Scientist who must Outgun a Mad Scientist in A Jet Boat | 2.99 | 114 |       1 |
| JENNIFER   | DAVIS        | Classics    | A Fanciful Documentary of a Frisbee And a Lumberjack who must Chase a Monkey in A Shark Tank         |        2.99 |    117 |             1 |
| ZERO       | CAGE         | Horror      | A Boring Epistle of a Butler And a Cat who must Fight a Pastry Chef in A MySQL Convention            |        0.99 |    126 |             1 |
| JOHNNY     | LOLLOBRIGIDA | Comedy      | A Fast-Paced Documentary of a Pastry Chef And a Dentist who must Pursue a Forensic Psychologist in The Gulf of Mexico | 2.99 | 130 |     1 |
| KARL       | BERRY        | Music       | A Fanciful Saga of a Hunter And a Pastry Chef who must Vanquish a Boy in Australia                   |        0.99 |    136 |             1 |
| UMA        | WOOD         | New         | A Action-Packed Drama of a Dentist And a Crocodile who must Battle a Feminist in The Canadian Rockies |       4.99 |    150 |             1 |
| BETTE      | NICHOLSON    | Documentary | A Intrepid Panorama of a Robot And a Boy who must Escape a Sumo Wrestler in Ancient China            |        2.99 |    169 |             1 |
| FRED       | COSTNER      | Travel      | A Fast-Paced Drama of a Robot And a Composer who must Battle a Astronaut in New Orleans              |        2.99 |    180 |             1 |
+------------+--------------+-------------+------------------------------------------------------------------------------------------------------+-------------+--------+---------------+
10 rows in set (0.00 sec)
```

Give the English explanation:

The above query selects columns first name, last name**,** category name, film description, film rental rate and film length
From **table 1 (Actor)**
To combine the output result from three tables, we use **two joins** as below.
Ie **join <table 1 (Actor).column name(actor_id) and table 2 (Category).column name(category_id)>**
Join <table 3 (Film).column name(film_id) and table 2 (Category) .column name(category_id)>
Used **aggregate** operator **(count**) (under each category name only 1 record is displayed, so count is1)
Used **Having clause (Having length > 85)**