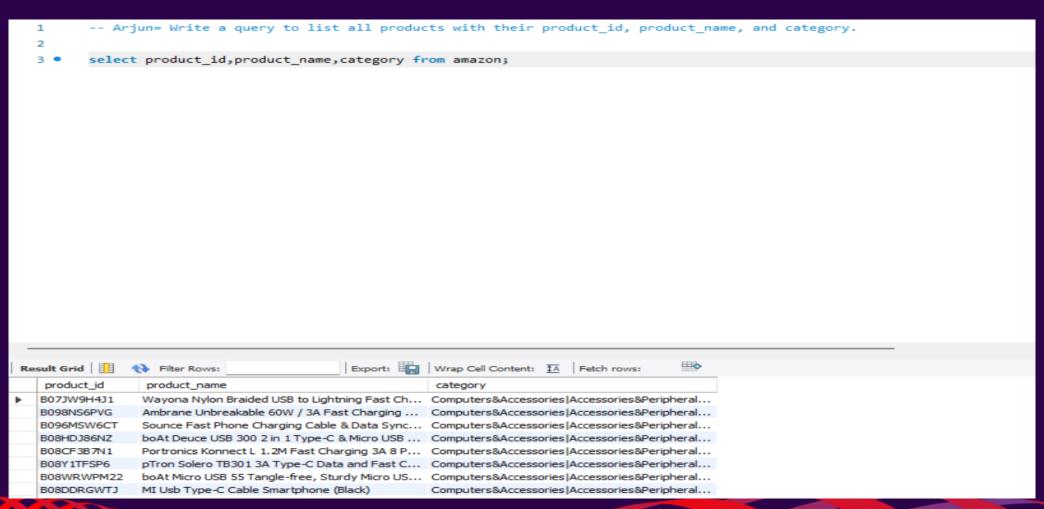
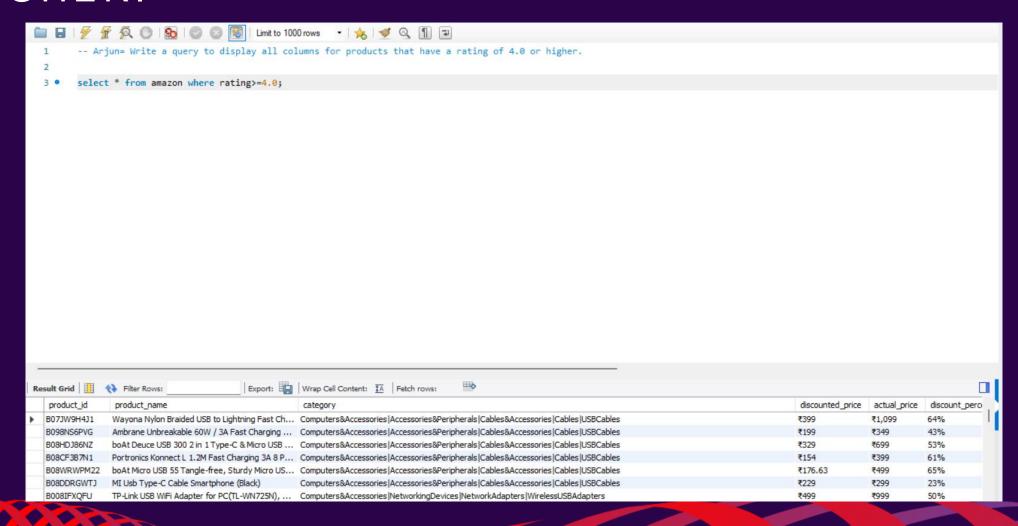




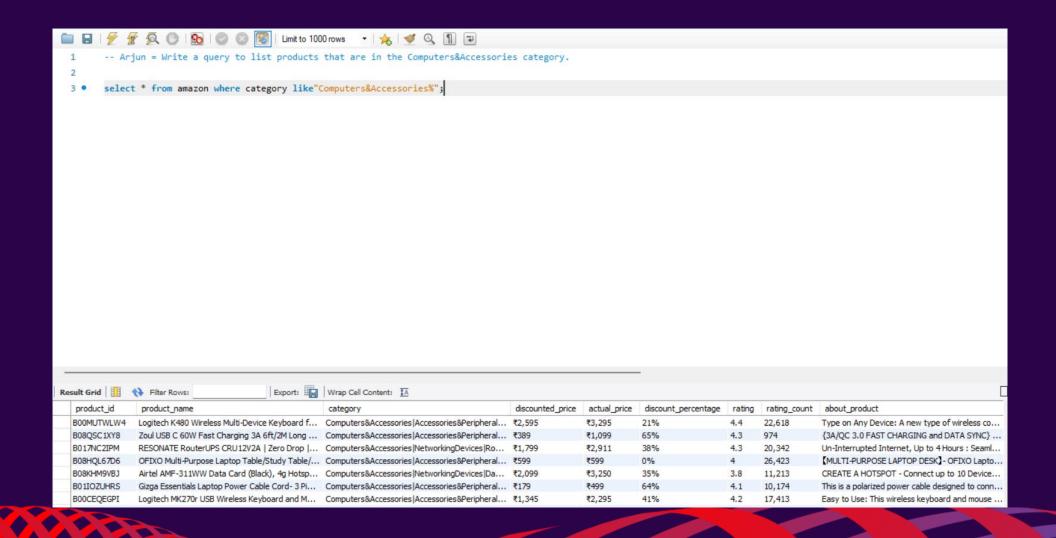
1) WRITE A QUERY TO LIST ALL PRODUCTS WITH THEIR PRODUCT_ID, PRODUCT_NAME, AND CATEGORY.



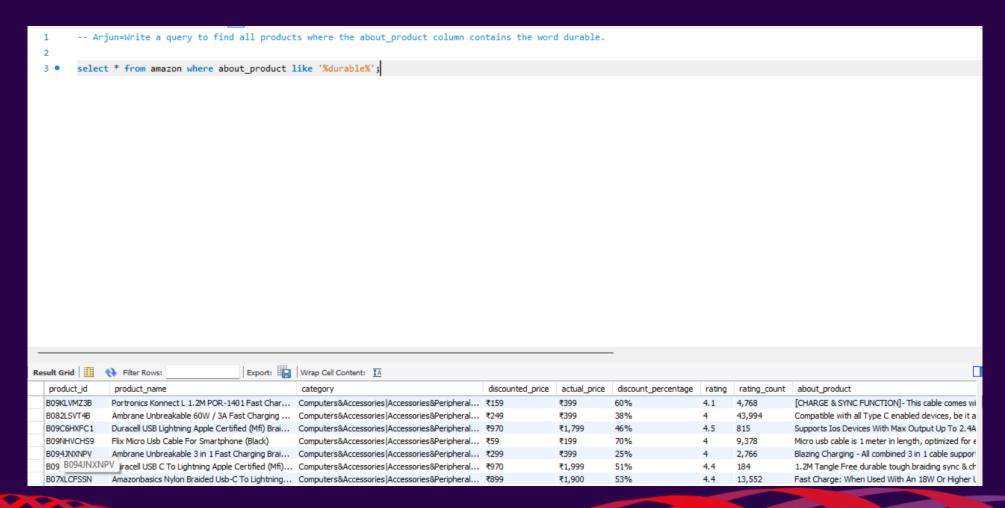
2) WRITE A QUERY TO DISPLAY ALL COLUMNS FOR PRODUCTS THAT HAVE A RATING OF 4.0 OR HIGHER.



3) WRITE A QUERY TO LIST PRODUCTS THAT ARE IN THE COMPUTERS&ACCESSORIES CATEGORY.



4) WRITE A QUERY TO FIND ALL PRODUCTS WHERE THE ABOUT_PRODUCT COLUMN CONTAINS THE WORD DURABLE.



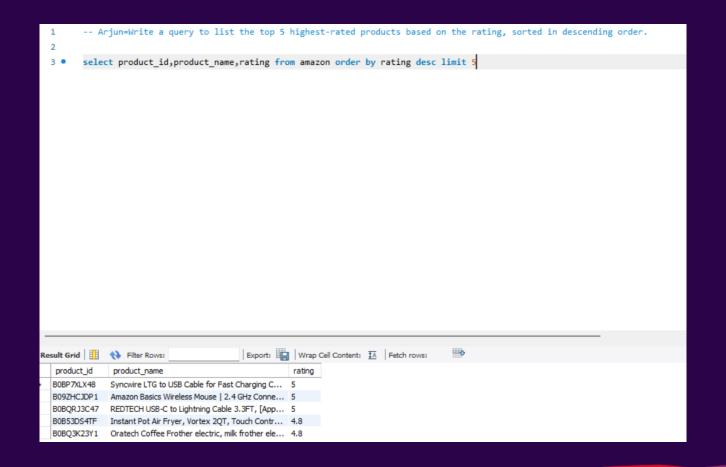
5) WRITE A QUERY TO COUNT THE TOTAL NUMBER OF PRODUCTS IN THE DATASET.

```
-- Arjun = Write a query to count the total number of products in the dataset.
       select count(product_id) total_number_of_products from amazon;
Export: Wrap Cell Content: IA
  total_number_of_products
```

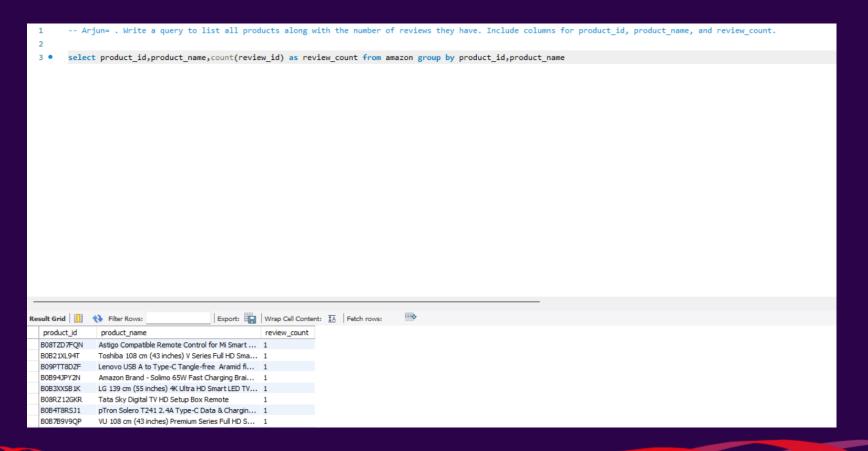
6) WRITE A QUERY TO FIND THE AVERAGE RATING OF ALL PRODUCTS.

```
-- Arjun=Write a query to find the average rating of all products.
        select round(avg(rating),2) average_rating from amazon;
                                         Export: Wrap Cell Content: IA
Result Grid Filter Rows:
   average_rating
4.09
```

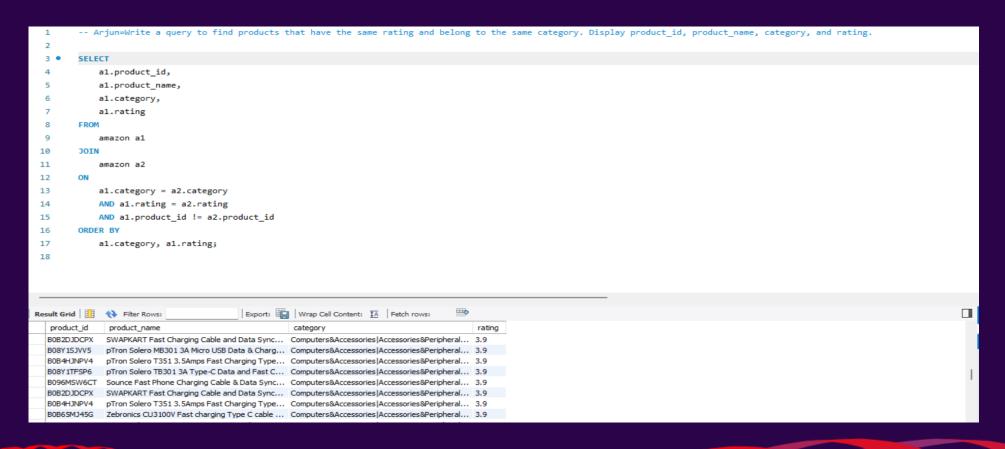
7) WRITE A QUERY TO LIST THE TOP 5 HIGHEST-RATED PRODUCTS BASED ON THE RATING, SORTED IN DESCENDING ORDER.



8) WRITE A QUERY TO LIST ALL PRODUCTS ALONG WITH THE NUMBER OF REVIEWS THEY HAVE. INCLUDE COLUMNS FOR PRODUCT_ID, PRODUCT_NAME, AND REVIEW_COUNT.



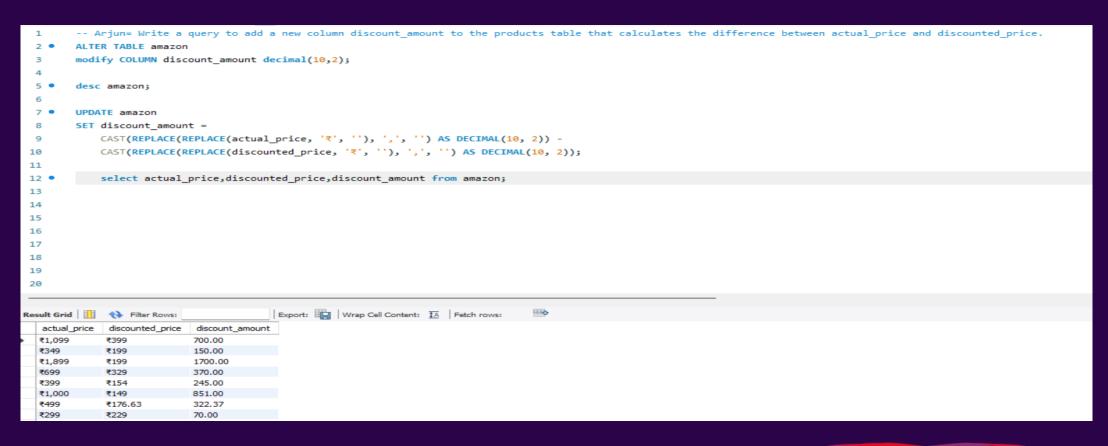
9) WRITE A QUERY TO FIND PRODUCTS THAT HAVE THE SAME RATING AND BELONG TO THE SAME CATEGORY. DISPLAY PRODUCT_ID, PRODUCT_NAME, CATEGORY, AND RATING.



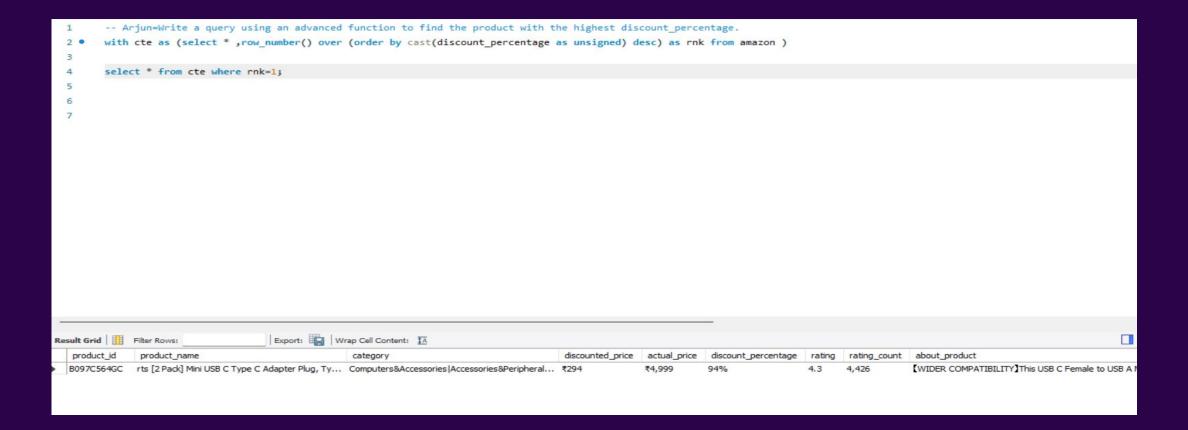
10) WRITE A QUERY USING A CASE STATEMENT TO CATEGORIZE PRODUCTS INTO THREE CATEGORIES BASED ON THEIR RATING: EXCELLENT FOR RATINGS 4.5 AND ABOVE, GOOD FOR RATINGS BETWEEN 4.0 AND 4.5, AND AVERAGE FOR RATINGS

```
Write a query using a CASE statement to categorize products into three categories based on their rating: Excellent for ratings 4.5 and above, Good for ratings between
        select product name, rating,
        case when rating>4.5 then "Excellent"
             when rating between 4.0 and 4.5 then "good"
             else "Average" end rating category
         from amazon
                                             Export: Wrap Cell Content: TA Fetch rows:
product_name
  TP-LINK AC1300 Archer T3U Plus High Gain USB... 4.4
  LRIPL Mi Remote Control with Netflix & Prime Vi... 3.2
  TP-Link Nano USB WiFi Dongle 150Mbps High Ga... 4.2
  Kodak 80 cm (32 inches) HD Ready Certified An... 4.2
  Airtel DigitalTV DTH Remote SD/HD/HD Recordin... 3.7
  AmazonBasics New Release Nylon USB-A to Ligh... 4.5
  Ambrane Fast 100W Output Cable with Type-C ... 4.2
  BlueRigger Digital Optical Audio Toslink Cable (3... 4.2
```

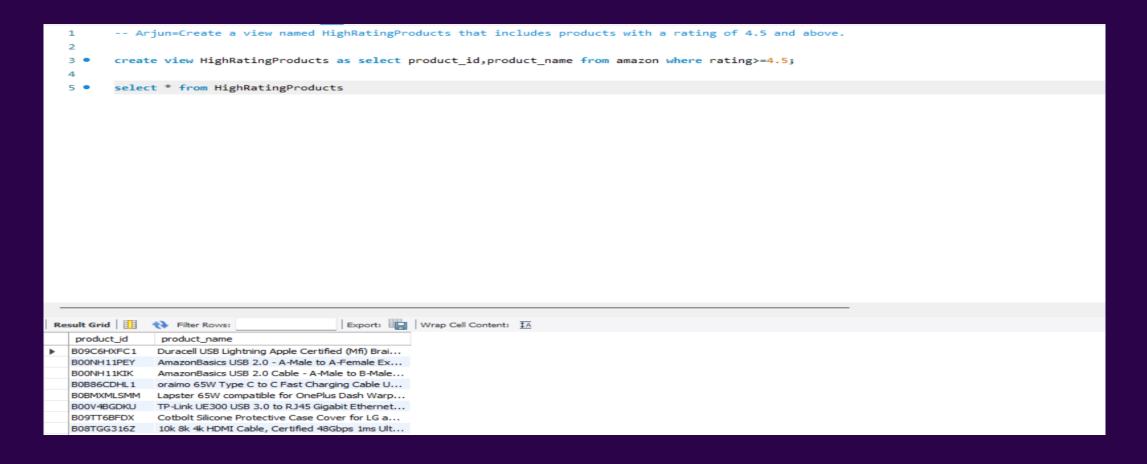
11) WRITE A QUERY TO ADD A NEW COLUMN DISCOUNT_AMOUNT TO THE PRODUCTS TABLE THAT CALCULATES THE DIFFERENCE BETWEEN ACTUAL_PRICE AND DISCOUNTED_PRICE.



12) WRITE A QUERY USING AN ADVANCED FUNCTION TO FIND THE PRODUCT WITH THE HIGHEST DISCOUNT_PERCENTAGE.



13) CREATE A VIEW NAMED HIGHRATINGPRODUCTS THAT INCLUDES PRODUCTS WITH A RATING OF 4.5 AND ABOVE.



14) WRITE A QUERY USING A WINDOW FUNCTION TO RANK PRODUCTS BASED ON THEIR RATING WITHIN EACH CATEGORY.

```
-- Arjun=. Write a query using a window function to rank products based on their rating within each category.
          SELECT
               category,
               product name,
               rating,
               RANK() OVER (PARTITION BY category ORDER BY rating DESC) AS rnk
          FROM amazon;
11
Result Grid | | No. | Filter Rows:
                                                     Export: Wrap Cell Content: $\overline{A}$
   category
                                                                                                                                   product name
  Computers&Accessories | Accessories&Peripherals | Audio&VideoAccessories | PCHeadsets
                                                                                                                                   Hp Wired On Ear Headphones With Mic With 3.5...
  Computers&Accessories | Accessories & Peripherals | Audio & Video Accessories | PCMicrophones
                                                                                                                                   JBL Commercial CSLM20B Auxiliary Omnidirectio... 3.9
  Computers&Accessories | Accessories & Peripherals | Audio & Video Accessories | PCMicrophones
                                                                                                                                   HUMBLE Dynamic Lapel Collar Mic Voice Recordi... 3.3
  Computers & Accessories | Accessories & Peripherals | Audio & Video Accessories | PCS peakers
                                                                                                                                   ZEBRONICS Zeb-Warrior II 10 watts 2.0 Multim... 4.1
  Computers&Accessories | Accessories&Peripherals | Audio & Video Accessories | PCSpeakers
                                                                                                                                   Zebronics Zeb Wonderbar 10 USB Powered 2.0 ... 4
  Computers&Accessories | Accessories & Peripherals | Audio & Video Accessories | Webcams & Vo IPEquipment | Webcams
                                                                                                                                   Logitech C270 Digital HD Webcam with Widescr... 4.3
  Computers&Accessories | Accessories & Peripherals | Audio & Video Accessories | Webcams & Vo IPE guipment | Webcams
                                                                                                                                   Lenovo 300 FHD Webcam with Full Stereo Dual ... 4.1
  Computers&Accessories | Accessories & Peripherals | Cables & Accessories | Cable Connection Protectors
                                                                                                                                   LAPSTER Spiral Charger Spiral Charger Cable Pr... 4.1
```

15) WRITE A STORED PROCEDURE TO UPDATE THE RATING OF A PRODUCT GIVEN ITS PRODUCT_ID AND NEW RATING.

BEFORE PROCEDURE CALL

product_id	rating
B07JW9H4J1	4.2

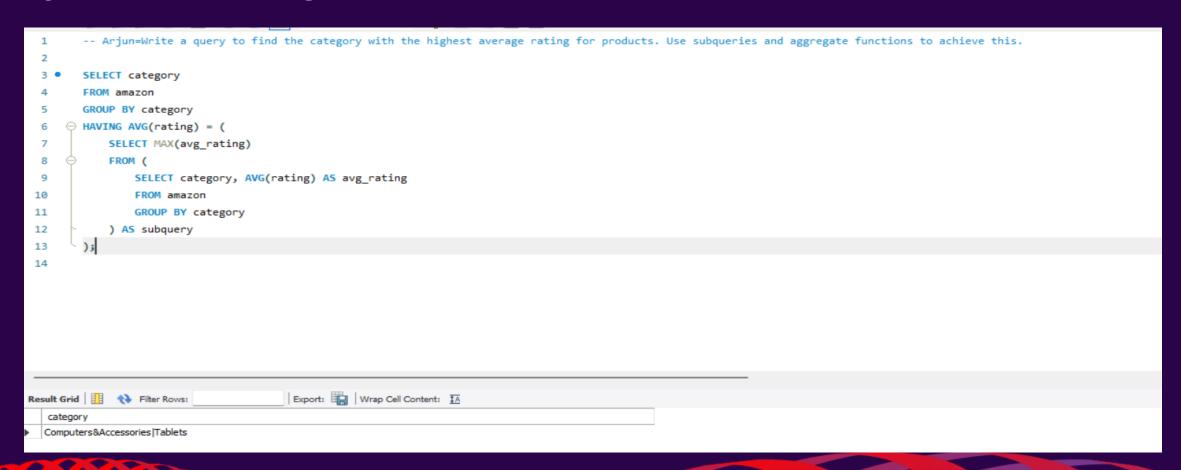
AFTER PROCEDURE CALL

```
-- Arjun=Write a stored procedure to update the rating of a product given its product id and new rating.

    ● CREATE PROCEDURE UpdateProductRating(

            IN p product id varchar(20),
            IN p_new_rating DECIMAL(3, 1)
        BEGIN
            UPDATE amazon
10
            SET rating = p new rating
            WHERE Product id = p product id;
11
12
13
            IF ROW COUNT() = 0 THEN
14
15
                SIGNAL SQLSTATE '45000' SET MESSAGE TEXT = 'Product not found';
16
            END IF;
17
        END //
18
        DELIMITER;
        select product id, rating from amazon;
        CALL UpdateProductRating("B07JW9H4J1", 4.5); -- B07JW9H4J1 Rating 4.2
                                         Export: Wrap Cell Content: 🖽 Fetch rows:
Result Grid
             Filter Rows:
  product id
               rating
  B07JW9H4J1
```

16) WRITE A QUERY TO FIND THE CATEGORY WITH THE HIGHEST AVERAGE RATING FOR PRODUCTS. USE SUBQUERIES AND AGGREGATE FUNCTIONS TO ACHIEVE THIS.



17) WRITE A QUERY TO FIND PAIRS OF PRODUCTS FROM THE SAME CATEGORY WHERE ONE PRODUCT HAS A HIGHER RATING THAN THE OTHER. DISPLAY COLUMNS FOR PRODUCT_ID_1, PRODUCT_NAME_1, RATING_1, PRODUCT_ID_2, PRODUCT_NAME_2, AND RATING_2.

```
-- Arjun=. Write a query to find pairs of products from the same category where one product has a higher rating than the other. Display columns for product id 1, product name
              al.product id product id 1,
              al.product_name product_name_1,
              al.rating rating 1,
              a2.product_id product_id_2,
              a2.product_name product_name_2,
              a2.rating rating 2
         FROM amazon a1
          JOIN amazon a2
11
              ON al.category = a2.category
12
              AND a1.product_id <> a2.product_id
              AND al.rating > a2.rating
13
                                               Export: Wrap Cell Content: A Fetch rows:
Result Grid Filter Rows:
                 product_name_1
                                                           rating_1 product_id_2 product_name_2
  B0BORJ3C47
                REDTECH USB-C to Lightning Cable 3.3FT, [App... 5
                                                                     B07JW9H4J1
                                                                                  Wayona Nylon Braided USB to Lightning Fast Ch... 4.5
                 Syncwire LTG to USB Cable for Fast Charging C... 5
                                                                    B07JW9H4J1
                                                                                  Wavona Nylon Braided USB to Lightning Fast Ch... 4.5
  BOBMXMLSMM
                Lapster 65W compatible for OnePlus Dash Warp... 4.5
                                                                    B098NS6PVG
                                                                                  Ambrane Unbreakable 60W / 3A Fast Charging ... 4
                Wayona Usb Type C Fast Charger Cable Fast C... 4.2
                                                                    B098NS6PVG
                                                                                  Ambrane Unbreakable 60W / 3A Fast Charging ... 4
  B07GVGTSLN
                Ambrane 2 in 1 Type-C & Micro USB Cable with ... 4.1
                                                                    B098NS6PVG
                                                                                  Ambrane Unbreakable 60W / 3A Fast Charging ... 4
                boAt Type C A750 Stress Resistant, Tangle-fre... 4.1
                                                                    B098NS6PVG
                                                                                  Ambrane Unbreakable 60W / 3A Fast Charging ... 4
                 oraimo 65W Type C to C Fast Charging Cable U... 4.5
                                                                     B098NS6PVG
                                                                                  Ambrane Unbreakable 60W / 3A Fast Charging ... 4
                Amazon Basics USB Type-C to USB-A 2.0 Male F... 4.3
                                                                                  Ambrane Unbreakable 60W / 3A Fast Charging ... 4
                 Portronics Konnect L 20W PD Ouick Charge Typ... 4.1
                                                                                  Ambrane Unbreakable 60W / 3A Fast Charging ... 4
```

THANK YOU

