--Q1 Which brand saw the most dollars spent in the month of June?

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| WITH  base AS  (  SELECT  ri.BRAND\_CODE ,  ri.TOTAL\_FINAL\_PRICE ,  extract(YEAR FROM purchase\_date) AS purchase\_year ,  extract(MONTH FROM purchase\_date) AS purchase\_month  FROM  receipt\_items ri  LEFT JOIN  receipts r  ON  ri.REWARDS\_RECEIPT\_ID = r.id  WHERE  TOTAL\_FINAL\_PRICE IS NOT NULL  )  ,  sale\_in\_june AS  (  SELECT  BRAND\_CODE ,  purchase\_year ,  SUM(TOTAL\_FINAL\_PRICE) AS TOTAL\_FINAL\_PRICE  FROM  base  WHERE  BRAND\_CODE IS NOT NULL  AND purchase\_month = '6'  GROUP BY  BRAND\_CODE,  purchase\_year  )  SELECT  BRAND\_CODE ,  purchase\_year ,  total\_final\_price  FROM  (  SELECT  BRAND\_CODE ,  purchase\_year ,  total\_final\_price,  rank() over(PARTITION BY  purchase\_year ORDER BY  total\_final\_price DESC) AS row\_num  FROM  sale\_in\_june)a  WHERE  row\_num='1';  **Output** |

--Q2 Which user spent the most money in the month of August?

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| WITH  user\_receipts\_agg AS  (  SELECT  user\_id ,  extract(YEAR FROM purchase\_date) AS purchase\_year ,  SUM(total\_spent) AS total\_spent  FROM  receipts  WHERE  extract(MONTH FROM purchase\_date) = '8'  GROUP BY  user\_id ,  extract(YEAR FROM purchase\_date)  )  SELECT  user\_id ,  purchase\_year ,  total\_spent  FROM  user\_receipts\_agg  WHERE  total\_spent IN  (  SELECT  MAX(total\_spent)  FROM  user\_receipts\_agg  GROUP BY  purchase\_year);  **Output** |

--Q3 What user bought the most expensive item?

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| WITH  receipt\_items\_cte AS  (  SELECT  REWARDS\_RECEIPT\_ITEM\_ID ,  REWARDS\_RECEIPT\_ID ,  total\_final\_price  FROM  receipt\_items  WHERE  total\_final\_price IN  (  SELECT  MAX(total\_final\_price)  FROM  receipt\_items)  )--Identifying the most expensive item using the cte  SELECT DISTINCT  r.user\_id ,  u.gender ,  u.birth\_date,  u.state  FROM  receipt\_items\_cte ric  LEFT JOIN  receipts r  ON  ric.REWARDS\_RECEIPT\_ID = r.id  LEFT JOIN  USERS u  ON  r.user\_id = u.id;  **Output** |

--Q4 What is the name of the most expensive item purchased?

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| SELECT  REWARDS\_RECEIPT\_ITEM\_ID ,  original\_receipt\_item\_text,  DESCRIPTION  FROM  receipt\_items  WHERE  total\_final\_price IN  (  SELECT  MAX(TOTAL\_FINAL\_PRICE)  FROM  receipt\_items);  **Output** |

--Q5 How many users scanned in each month?

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| SELECT  extract(YEAR FROM date\_scanned) AS scanned\_year ,  extract(MONTH FROM date\_scanned) AS scanned\_month ,  COUNT(DISTINCT user\_id) AS num\_of\_users\_scanned  FROM  receipts  GROUP BY  extract(YEAR FROM date\_scanned),  extract(MONTH FROM date\_scanned)  **Output** |