



7

# Cards Issued Difference (JPMorgan Chase)

## QUESTION

Your team at JPMorgan Chase is soon launching a new credit card, and to gain some context, you are analyzing how many credit cards were issued each month.

Write a query that outputs the name of each credit card and the difference in issued amount between the month with the most cards issued, and the least cards issued. Order the results according to the biggest difference.

`monthly_cards_issued` Table:

Column Name	Type
issue_month	integer
issue_year	integer
card_name	string
issued_amount	integer

`monthly_cards_issued` Example Input:

card_name	issued_amount	issue_month	issue_year
Chase Freedom Flex	55000	1	2021
Chase Freedom Flex	60000	2	2021
Chase Freedom Flex	65000	3	2021
Chase Freedom Flex	70000	4	2021
Chase Sapphire Reserve	170000	1	2021
Chase Sapphire Reserve	175000	2	2021
Chase Sapphire Reserve	180000	3	2021

## Step 1: Identify the problem of the case

Create a query that includes the name of each credit card as well as the difference in issue amount between the month with the most cards and the month with the fewest cards. Sort the findings according to the largest difference.

### Example Output:

Column Name	Type
card_name	string
issued_amount	integer

## Step 2 : Analyze and solve problems

First we need to find the maximum and minimum number of issued\_amount of each card with the COUNT() function.

```
SELECT card_name
      , MAX(issued_amount) max_issued_amount
      , MIN(issued_amount) min_issued_amount
   FROM monthly_cards_issued
  GROUP BY card_name
```

Then the subtraction of the largest and the smallest number will give the difference to find.

```
SELECT card_name
      , MAX(issued_amount) - MIN(issued_amount) difference
  FROM monthly_cards_issued
 GROUP BY card_name
 ORDER BY 2 DESC
```

We have the output bellow:

card_name	difference
Chase Sapphire Reserve	30000
Chase Freedom Flex	15000