Question- Find monthly sales and sort it by descending order.

```
SELECT EXTRACT(year from order_date) AS year, to_char(order_date, 'Mon') AS month,  SUM(sales) AS sales
FROM monthly_sales
GROUP BY 1,2
ORDER BY sales DESC;
```

INPUT

	order_date date	sales integer
1	2021-01-01	20
2	2021-01-02	32
3	2021-02-08	45
4	2021-02-04	31
5	2021-03-21	33
6	2021-03-06	19
7	2021-04-07	21
8	2021-04-22	10

OUTPUT

	year numeric	month text	sales bigint
1	2021	Feb	76
2	2021	Jan	52
3	2021	Mar	52
4	2021	Apr	31

Question- Find the candidates best suited for an open Data Science job. Find proficient candidates in "Python, SQL, and Power BI". Write a query to list the candidates who possess all of the required skills for the job. Sort the output by candidate ID in ascending order.

```
SELECT candidate_id, COUNT(skills) AS skill_count
FROM applications
WHERE skills IN ('Power BI', 'Python', 'SQL')
GROUP BY 1
HAVING COUNT(skills) = 3
ORDER BY 2 DESC;
```

INPUT

	candidate_id integer	skills character varying
1	101	Power BI
2	101	Python
3	101	SQL
4	102	Tableau
5	102	SQL
6	108	Python
7	108	SQL
8	108	Power BI
9	104	Python
10	104	Excel

OUTPUT

	candidate_id integer	skill_count bigint
1	101	3
2	108	3

Question- List all the matches between teams, if matches are played once

```
WITH cte AS (
        SELECT *, ROW_NUMBER() OVER (ORDER BY team ASC) AS id
        FROM product_question_match
        )
SELECT a.team  AS  A_Team, b.team  AS  B_Team
FROM cte as a
JOIN cte as b   ON a.id != b.id
WHERE a.id < b.id;
```

INPUT

	team character varying (20)
1	India
2	Pak
3	Aus
4	Eng

OUTPUT

	a_team character varying (20)	b_team character varying (20)
1	Aus	Eng
2	Aus	India
3	Aus	Pak
4	Eng	India
5	Eng	Pak
6	India	Pak

Question- Write the query to get the output.

```
WITH cte AS (
    SELECT CONCAT(id, ' ', name) AS con, NTILE(4) OVER (ORDER BY id ASC) AS groups
    FROM emp
)
SELECT STRING_AGG(con, ', ') AS result, groups
FROM cte
GROUP BY groups
ORDER BY groups ASC;
```

INPUT

	id integer	name character varying (10)
1	1	Emp1
2	2	Emp2
3	3	Emp3
4	4	Emp4
5	5	Emp5
6	6	Emp6
7	7	Emp7
8	8	Emp8

OUTPUT

	result text	groups integer
1	1 Emp1, 2 Emp2	1
2	3 Emp3, 4 Emp4	2
3	5 Emp5, 6 Emp6	3
4	7 Emp7, 8 Emp8	4