-- create a table

CREATE TABLE poll\_investments (

user\_id VARCHAR(10),

poll\_id VARCHAR(10),

poll\_option\_id CHAR(1),

amount INT,

created\_dt DATE

);

-- insert some values

INSERT INTO poll\_investments (user\_id, poll\_id, poll\_option\_id, amount, created\_dt) VALUES

('id1', 'p1', 'A', 200, '2021-12-01'),

('id2', 'p1', 'C', 250, '2021-12-01'),

('id3', 'p1', 'A', 200, '2021-12-01'),

('id4', 'p1', 'B', 500, '2021-12-01'),

('id5', 'p1', 'C', 50, '2021-12-01'),

('id6', 'p1', 'D', 500, '2021-12-01'),

('id7', 'p1', 'C', 200, '2021-12-01'),

('id8', 'p1', 'A', 100, '2021-12-01');

-- query/read

SELECT \* FROM poll\_investments;

WITH looser AS(

-- lost\_amt=>1500 by A, B, D

SELECT SUM(amount) AS lost\_amt

FROM poll\_investments

WHERE poll\_option\_id IN ('A', 'B', 'D')),

winner AS(

-- gain who poll on C\*=>user\_id: id2, id5, id7

SELECT user\_id, amount, amount/ -- finding out the ratios of winners

(SELECT SUM(amount) FROM poll\_investments WHERE poll\_option\_id='C') AS ratio

FROM poll\_investments

WHERE poll\_option\_id = 'C')

SELECT user\_id, ROUND((ratio\*lost\_amt + amount)) AS Returns

FROM winner, looser

<https://www.mycompiler.io/view/C34fl3zmtiI>

-- create a table

CREATE TABLE sales\_data (

city VARCHAR(50),

year INT,

month INT,

sales INT

);

-- insert some values

INSERT INTO sales\_data (city, year, month, sales) VALUES

('Delhi', 2020, 5, 4300),('Delhi', 2020, 6, 2000),('Delhi', 2020, 7, 2100),('Delhi', 2020, 8, 2200),

('Delhi', 2020, 9, 1900),('Delhi', 2020, 10, 200),

('Mumbai', 2020, 5, 4400),('Mumbai', 2020, 6, 2800),('Mumbai', 2020, 7, 6000),('Mumbai', 2020, 8, 9300),

('Mumbai', 2020, 9, 4200),('Mumbai', 2020, 10, 9700),

('Bangalore', 2020, 5, 1000),('Bangalore', 2020, 6, 2300),('Bangalore', 2020, 7, 6800),

('Bangalore', 2020, 8, 7000),('Bangalore', 2020, 9, 2300), ('Bangalore', 2020, 10, 8400);

-- query/read

SELECT \*

FROM sales\_data;

WITH serial AS(

-- serial order of city Delhi-1, Mumbai-2, Bangalore-3

SELECT \*, CASE city WHEN "Delhi" THEN 1

WHEN "Mumbai" THEN 2

WHEN "Bangalore" THEN 3

END AS city\_order

FROM sales\_data)

-- Col: city, year, month, sales, [city\_order]

SELECT city, year, month, sales,

LAG(sales) OVER(PARTITION BY city\_order ORDER BY month) AS previousMonthSales,

LEAD(sales) OVER(PARTITION BY city\_order ORDER BY month) AS nextMonthSales,

SUM(sales) OVER(PARTITION BY city\_order ORDER BY month) AS YTDSales

FROM serial

<https://onecompiler.com/mysql/42mvztjcu>