2. Below table (Table 1) has city and month wise sales data. Create a SQL query to return output as illustrated in Table 2.

Table 1

City	Year	Month	Sales
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

Table 2

City	Year	Month	Sales	Previous Month Sales	Next Month Sales	YTD Sales
Delhi	2020	5	4300		2000	4300
Delhi	2020	6	2000	4300	2100	6300
Delhi	2020	7	2100	2000	2200	8400

Delhi	2020	8	2200	2100	1900	10600
Delhi	2020	9	1900	2200	200	12500
Delhi	2020	10	200	1900		12700
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			

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Answer(2):-

```
CREATE TABLE SalesTable (
   City VARCHAR(20),
   Year INT,
   Month INT,
   Sales INT
);
INSERT INTO SalesTable (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);

select * from SalesTable;
WITH SalesData AS (
  SELECT
    City,
    Year,
    Month,
    Sales,
    LAG(Sales) OVER (PARTITION BY City, Year ORDER BY Month) AS Previous_Month_Sales,
    LEAD(Sales) OVER (PARTITION BY City, Year ORDER BY Month) AS Next_Month_Sales,
    SUM(Sales) OVER (PARTITION BY City, Year ORDER BY Month ROWS BETWEEN
UNBOUNDED PRECEDING AND CURRENT ROW) AS YTD_Sales
  FROM
    SalesTable
)
SELECT
  City,
  Year,
```

```
  Month,
  Sales,
  COALESCE(Previous_Month_Sales, '') AS Previous_Month_Sales,
  COALESCE(Next_Month_Sales, '') AS Next_Month_Sales,
  YTD_Sales
FROM
  SalesData
ORDER BY
case
   WHEN City = 'Delhi' THEN 1
     WHEN City = 'Bangalore' THEN 2
     WHEN City = 'Mumbai' THEN 3
  END,
  Year,
  Month;
```