

SQL – Assignment

1. We have a table which has 5 columns.
 - a. User_id, poll_id, poll_option_id, amount, created_dt
 - b. Users invest money on these different poll options - these entries are there in the table
 - c. One of the options is the outcome of the event.
 - Event: How many matches will the Indian cricket team win in 2022?
 - i. Less than 50
 - ii. 50-60
 - iii. 61-65
 - iv. Greater than 65
 - India wins 63 matches in the end.
 - Option C is the winner
 - Money invested in option A, B and D should be proportionately distributed amongst users who invested money in option C
 - For example - If total money invested in option A, B and D is Rs. 1500 and there are 3 users who invested 500 in option C {250, 200 and 50}
 - These users would receive (750, 600 and 150 respectively) - sum is 1500.
 - d. Write down a query for the above settlement process

Input Table:

User_ID	Poll_Id	Poll_Option_Id	Amount	Created_dt
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

Output Table: Option C wins

User ID	Returns
id2	1000
id5	200
id7	800

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			

Submit the two SQL queries as two separate files with names: <Your full name>_SQL_ans1 and <Your full name>_SQL_ans2