**Analysis A**

1. We have a table that has 5 columns.

a. User\_id, poll\_id, poll\_option\_id, amount, created\_dt

c. One of the options is the outcome of the event.

               Event: How many matches will the Indian cricket team win in 2022?

1. Less than 50
2. 50-60
3. 61-65
4. Greater than 65

* India wins 63 matches in the end.
* Option C is the winner
* Money invested in options A, B, and D should be proportionately distributed amongst users who invested money in option C
* For example - If the total money invested in options 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) – the sum is 1500.

1. 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 |

**Analysis B**

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Input\_Table** | | | |
| **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 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Output\_Table** | | | | | | |
| **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 |  |  |  |