LeadSquared Assessment – Reports Developer

Date: 10th December 2020

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SECTION – 1

1. **Select** DEPARTMENT, **count(*)** from Employee **group_by** DEPARTMENT;

2. **Select** FIRST NAME, LAST NAME, DEPARTMENT from Employee **where** MANAGER = EMPLOYEE_ID **AND** MANAGER **IS NOT NULL**;

3. **Select** FIRST NAME, LAST NAME, **SUM**(INCENTIVE_AMOUNT), INCENTIVE_DATE **from** Employee A **Inner Join** Incentives B **on** A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID **and** (INCENTIVE_DATE = month(INCENTIVE_DATE) = 'N');

   N = number given corresponding to the month

4. **Select** FIRST NAME, LAST NAME, **month**(INCENTIVE_DATE) **from** Employee A **Inner Join** Incentives B **on** A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID **and** max(INCENTIVE_AMOUNT) group_by A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID;

SECTION – 2

5.

- Start both 7-minute sand timer and the 4-minute sand timer simultaneously.
    - Once the 4-minute sand timer is over turn it instantly.

      At this moment Time Elapsed: 4 minutes

      Time Remaining: 7- 4=3 minutes of sand in 7-minute timer
    - Once the 7-minute sand timer ends turn it instantly.

      At this moment Time Elapsed: 7 minutes.

      Time remaining: 4 – 3 =1 minutes of sand in the 4-minute sand timer.
- After the 4-minute sand timer ends, only 1 minute is elapsed in 7-minute sand timer, therefore for the next one minute turn the 7-minute sand timer upside down.

  Time Elapsed: 7 + 1 = 8 minutes.
- When the 7-minute sand timer ends, total time elapsed is 9 minutes.

  Time elapsed: 8 + 1 = 9 minutes

6. P (**Both girls** or **At least one girl**) = P (**both girls**) / P (**At least one girl**)

   P (Both girls) = $\frac{1}{2} * \frac{1}{2} = \frac{1}{4}$

   P (At least one girl) = 1 - P(No girls)

   P (No girls) = P(Both boys) = $\frac{1}{2} * \frac{1}{2} = \frac{1}{2}$

   P (AT least one girl) = 1 - $\frac{1}{4} = \frac{3}{4}$

   Thus, P (Both Girls | At least one girl) = $\frac{1/4}{3/4} = \mathbf{\frac{1}{3}}$

7. The writer within the argument concludes that because Rons's Café enhanced its business by 10% over the last year by advertising within the local radio station, thus alternative businesses ought to imitate and advertise their businesses on the local radio to create their business additional profitable. However, the argument is imperfect as a result of it fails to produce decent support in favor of the argument.

   First, we are informed that for Ron's Café enhanced its business by 10% over the last year by advertising within the local radio, however it's not been mentioned that whether or not the rise within the business was offset by the number of cash spent on advertising within the radio channel. If the previous state of affairs holds true, then corporations truly may not be increasing their profits.

   Second, although we tend to take into account that the business for Ron's Cafe occasionally enhanced when it publicized within the local radio, we tend to can't be certain that this can happen for alternative businesses. It might rather be the case that a lot of folks that hear the radio can be occasional coffee lovers or tea drinkers, however may not have an interest in alternative product such as Ron's Café's coffee/tea. Therefore, the generalization that the author makes supported one case may not hold true for alternative eventualities or businesses.

   Finally, there may be alternative alternate reasons that might have contributed to the success of Ron's Cafe like a brand new outlet or higher management of the cafe resources or introduction of a brand new product within the café outlet that sold-out well. Any of those reasons might account for the rise within the business. Therefore, advertising within the local radio station may not be the sole contributor for the rise Ron's café business.