Leadsquared
Reports Developer Test
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Table Name: Employee

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	MANAGER	DEPARTMENT
1	John	Abraham	1000000	01-JAN-13 12.00.00 AM	3	Banking
2	Michael	Clarke	800000	01-JAN-13 12.00.00 AM	4	Insurance
3	Roy	Thomas	700000	01-FEB-13 12.00.00 AM		Banking
4	Tom	Jose	600000	01-FEB-13 12.00.00 AM		Insurance
5	Jerry	Pinto	650000	01-FEB-13 12.00.00 AM	4	Insurance
6	Philip	Mathew	750000	01-JAN-13 12.00.00 AM	7	Services
7	TestName1	123	650000	01-JAN-13 12.00.00 AM		Services
8	TestName2	Lname%	600000	01-FEB-13 12.00.00 AM	4	Insurance

Table Name: Incentives

EMPLOYEE_REF_ID	INCENTIVE_DATE	INCENTIVE_AMOUNT
1	06-FEB-13	5000
2	01-FEB-13	3000
3	07-FEB-13	4000
1	01-JAN-13	4500
2	04-JAN-13	3500
1	08-FEB-13	6000

1. Write a query to print the number of employees per department in the organization
   SELECT Department, COUNT(*)
   FROM Employee
   GROUP BY Department;
2. Write an SQL query to find the name of the top-level manager of each department
   SELECT First_Name
   FROM Employee

      WHERE Manager = (SELECT max(Manager) FROM Employee GROUP BY
      Department);

3. Write a query to find the total incentive received by a given employee in a given month.

    SELECT sum(Incentive_Amount) FROM Incentives WHERE Employee_Ref_Id=1;

4. Write a query to find the month where employees got maximum incentive

  SELECT extract(month FROM Incentive_Date) FROM Incentives WHERE
Incentive_Amount = (SELECT max(Incentive_Amount) FROM Incentives);

5. It is a Hypothetical answer.

Start both the timers at a time.

Flip over 4 m timer twice & so that when 7m timer is over, flip it.

There is sand remaining in 4m timer for one minute.

Start 7m timer and when one minute sand in 4m timer is over mark that point on 7m timer.

We will get one minute marking on 7m timer.

Now start 4m timer and then flip it over so that we get 4+ 4 = 8m and then start 7m timer up to one minute mark, we will get:

4+4+1 = 9 minutes.

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

P(Both girls) = .5 * .5 = .25
P(At least one girl) = 1 - P(No girls)
P(No girls) = P(Both boys) = .5 * .5 = .25
P(AT least one girl) = 1 - .25 = .75

Thus, P(Both Girls | At least one girl) = .25 / .75 = 1/3

7. In an attempt to sell radio advertising time, this ad claims that radio advertising will make businesses more profitable. The evidence cited is a ten percent increase in business that the Cumquat Cafe has experienced in the year during which it advertised on the local radio station.

This argument is unconvincing because two questionable assumptions must be made for the stated evidence to support the author's conclusion.

The first assumption is that radio advertising alone has caused the increase in business at the Cumquat Cafe. This assumption is questionable because it overlooks a number of other factors that might have contributed to the Cumquat's success. For example, the Cumquat might have changed owners or chefs. It might have launched a coupon ad campaign in the local print media. Or it might have changed or updated the menu.

Yet another possibility is that a local competitor went out of business. These are just a few of the factors that could help explain the Cumquat's growth. Because the author fails to eliminate these possibilities, the assumption in question need not be accepted.

Even if it is granted that radio advertising is responsible for the Cumquat's success, another assumption must be made before we can conclude that radio advertising will result in increased profits for businesses in general. We must also assume that what is true of the Cumquat will likewise be true of most other businesses.

But there are all kinds of important differences between cafes and other businesses that could affect how radio audiences react to their advertising. We cannot safely assume that, because a small restaurant has benefited from radio advertising, any and all local businesses will similarly benefit.

In conclusion, it would be imprudent for a business to invest in radio advertising solely on the basis of the evidence presented. To strengthen the conclusion, it must be established that radio advertising was the principal cause of increased business at the Cumquat.

Once this is shown, it must be determined that the business in question is sufficiently similar to the Cumquat and so can expect similar returns from investment in radio ad time.