LEADSQUARE

Name- Joy Sen Reg no – 17BCD7093

**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, DEPARTMENT FROM EMPLOYEE WHERE MANAGER IS NULL ORDER BY DEPARTMENT;

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

SELECT FIRST\_NAME, SUM(INCENTTIVE\_AMOUNT),DENSE\_RANK()

OVER (PARTITION BY INCENTIVE\_DATE ) from EMPLOYEE a, INCENTIVES b where a.EMP\_ID=b.EMP\_ID;

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

select max(feb,jan) from Incentives where (select sum(INCENTIVE\_AMOUNT) from incentives where INCENTIVE\_DATE like '%FEB%' as feb AND select sum(INCENTIVE\_AMOUNT) from incentives where INCENTIVE\_DATE like '%JAN%'' as jan);

**5. You have two sand timers, which can show 4 minutes and 7 minutes respectively. Use both the sand timers (at a time or one after other or any other combination) and measure a time of 9 minutes**

We will first start both the 4 min and 7 min hour glass at the same time. When 4 minutes is over, we flip it over. Now 7 min hour glass is left with 3 minutes. After full completion of 7min hour glass 4 min hour glass have 1 min remaining. Now when 4min hour glass runs out of sand 7 min hour glass is filed with 6 min of sand and 1min on the other side of the hour glass, we flip the hourglass at that moment. Therefore 9 min is achieved.

**6. John and Mary are a married couple. They have two kids, one of them is a girl. Assume safely that the probability of each gender is 1/2. What is the probability that the other kid is also a girl?**

One of the kids is a girl and we have determined the gender of another kid and the probability of each gender is half so the probability of the other kid be a girl is half. (Since probability of each gender is half).

**7. The following appeared as part of a campaign to sell advertising time on a local radio station to local businesses.**

***Ron’s Cafe began advertising on our local radio station this year and was delighted to see its business increase by 10 percent over last year's totals. Their success shows you how you can use radio advertising to make your business more profitable.***

**Discuss how well reasoned you find this argument. In your discussion be sure to analyze the line of reasoning and the use of evidence in the argument. For example, you may need to consider what questionable assumptions underline the thinking and what alternative explanations or counterexamples might weaken the conclusion. You can also discuss what sort of evidence would strengthen or refute the argument, what changes in the argument would make it more logically sound and what, if anything, would help you better evaluate in conclusion.**

I find this argument good but a lot more can be added to make it better. First of all, there is no proof of Ron’s café weather their business has increased 10% or not. They could have put their customer testimonial instead which would have been catchier. Secondly advertising is only a part of success it also includes product quality, customer service, brand awareness and lot more so by only doing radio advertisement not all business can increase their success rate. The next point is they have not mentioned their process on how they will conduct the campaign which is a big question mark the advertisement has a chance of more success if it is transparent and the customer knows how their product is going to advertised. In this they can mention the process and the timings along with the number of repetitions they will do in a day. The next thing is they need to highlight their brand name on the advertisement more than telling about others business success of course it is a part of advertisement and gaining customer trust but putting it in the headline is not a good idea and customer attention is getting divided between Ron’s café and radio advertising. The correct thing to do here is first highlight the radio advertising and put the way or by whom they will advertise the products which will highlight the main cause of the advertisement within a few words and customers who are really interested can continue to know more on this matter.