**ASSIGNMENT 1 - Probability Questions**

**Questions To Add your Responses :**

1. What is probability? List down some laws of probability
2. What is the difference between independent and dependent events?
3. What is conditional probability? What is the formula to calculate conditional probability?
4. According to hospital records, 30% of patients suffering from a disease will die. Find out the probability that 2 out of the 5 randomly selected patients survive.

1. [You pull two cards, one at a time, from a deck of cards, without replacement. What is the probability that the second card you pick has a different color, or different suit, than the first card?](https://www.interviewquery.com/questions/different-card)
2. How does Probability Mass Function and Probability Density Function differ?

1. [You roll two dice. What’s the probability of rolling at least one 4? What’s the probability of rolling a 4 given a dice](https://www.interviewquery.com/questions/n-die)?
2. What is the probability of getting a sum less than 8 when two dice are thrown?
3. If there are 12 horses in a race, numbered 1 to 12, what is the probability that horses bearing number 3, 5 or 8 will win the race?

**Explain the questions and problems in your approach while solving them. No copy paste allowed. Description of the outcome is really important to get an understanding better.**