1. How do you assess the statistical significance of an insight?

   → Formulate Null and Alternative Hypotheses
   → Select a Statistical Test
   → Calculate to get the Alpha value
   → Calculate the p-value
   →if p-value is less than alpha, then the result is statistically significant.

2. What is the Central Limit Theorem? Explain it. Why is it important?

   → According to the central limit theorem, as the sample size get bigger, the distribution of the mean will be normally distributed. It is important because it allows us to safely assume that the sampling distribution of the mean will be normal in most cases. So we can use the statistical strategies that uses a normal distribution.

3. What is the statistical power?

   → It is the probability of a result to be statistically significant.

4. How do you control for biases?

5. What are confounding variables

   → Confounding variables, also known as confounders, are third variables in a research study that can distort the apparent relationship between the independent variable and the dependent variable.

6. What is A/B testing?

   → A/B testing is mostly used in websites/apps, to compare two or more versions of something to determine which one performs better in terms of a specific outcome or metric.
   → For example, you might want to change the color of a button on a webpage. Create many versions(A,B,C etc.) of the button. Randomly assign users to one of the versions. Collect the date and implement statistical analysis to figure out which is the best version to implement.

7. What are confidence intervals?

   → A confidence interval (CI) is a statistical range or interval used to estimate the range of values within which a population parameter is likely to fall with a certain level of confidence.