QNST: Explain what you understand by hypotheses testing in brief.

Hypothesis can simply be defined as a scientific intelligent guess. Therefore, a hypothesis can be defined as a statement that is an informed guess but cannot be believed until proven. When proven true, hypothesis becomes a fact.

QNST: What statistical hypothesis test can be applied to two samples of categorical data with the same categories to determine if the frequency distributions are significally different.

The chi-square good-ness of fit test is used to test whether the frequency distribution of categorical variable is different from your expectations.

The chi-square test for categorical data. It is used to determine whether your data are significantly different from what you expected.

QNST: Briefly state a hypothesis you would like to test in a data science project of your choice.

A t-test (Because it requires variables measured at interval or ratio levels and close to normal distribution of the groups differences).