NAME: AGBATO OLAOLUWA

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(1) Hypothesis testing is an act in statistics whereby an analyst [tests](https://www.investopedia.com/terms/w/wilcoxon-test.asp) an assumption regarding a population parameter. The methodology employed by the analyst depends on the nature of the data used and the reason for the analysis.

Hypothesis testing is used to assess the plausibility of a hypothesis by using sample data. Such data may come from a larger population, or from a data-generating process. The word "population" will be used for both of these cases in the following descriptions.

(2) The p-value approach to hypothesis testing uses the calculated probability to determine whether there is evidence to reject the null hypothesis. The null hypothesis, also known as the conjecture, is the initial claim about a population (or data generating process). while the classical approach to hypothesis testing computes a **test** statistic from the empirical data and then makes a comparison with the critical value. If the **test** statistic in this **classical approach** is larger than the critical value, then the null **hypothesis** is rejected

(3) Hypothesis testing is important because it helps administrators, clinicians and researchers in making wise decisions which usually depends on the statistical decision.