1. Student's t-test:
   * Application: Comparing the means of two independent samples.
   * Example: Comparing the average scores of two groups of students who received different teaching methods.
2. Chi-Square test:
   * Application: Assessing the independence between categorical variables.
   * Example: Testing if there is a relationship between smoking habits (smoker/non-smoker) and the incidence of lung cancer.
3. ANOVA (Analysis of Variance):
   * Application: Comparing means across multiple groups.
   * Example: Assessing whether there are significant differences in the average test scores of students from different schools.
4. Mann-Whitney U test:
   * Application: Comparing the medians of two independent samples.
   * Example: Comparing the rankings of two different brands based on customer satisfaction surveys.
5. Kruskal-Wallis test:
   * Application: Comparing medians across multiple groups.
   * Example: Analyzing the effectiveness of three different treatments on pain relief in patients with a particular medical condition.
6. Pearson correlation test:
   * Application: Assessing the linear relationship between two continuous variables.
   * Example: Investigating the relationship between the height and weight of individuals in a population.
7. Linear regression:
   * Application: Modeling the relationship between a dependent variable and one or more independent variables.
   * Example: Predicting house prices based on factors such as location, size, and number of bedrooms.
8. Logistic regression:
   * Application: Modeling the relationship between a binary dependent variable and independent variables.
   * Example: Predicting whether a customer will churn or not based on factors like age, usage patterns, and customer type.

These are just a few examples of statistical tests and their associated applications. The choice of test depends on the research question, type of data, and assumptions made about the data.

1. Wilcoxon signed-rank test:
   * Application: Comparing paired samples.
   * Example: Determining if there is a significant difference in performance before and after a training program.
2. Fisher's exact test:
   * Application: Assessing the association between categorical variables in small sample sizes.
   * Example: Investigating if there is an association between gender (male/female) and the preference for a specific brand of soda.
3. Mann-Whitney-Wilcoxon test:
   * Application: Comparing independent samples when the assumption of normality is violated.
   * Example: Comparing the reading speeds of two groups of individuals who have different reading strategies.
4. McNemar's test:
   * Application: Examining the association between two categorical variables in paired data.
   * Example: Assessing if there is a significant difference in the success rates of a medical treatment before and after a new intervention.
5. One-sample t-test:
   * Application: Examining if the mean of a single sample significantly differs from a population mean.
   * Example: Assessing if the average weight of a sample of apples differs significantly from the average weight claimed by the manufacturer.
6. Chi-Square goodness-of-fit test:
   * Application: Evaluating whether observed data fits an expected distribution.
   * Example: Testing if the observed allele frequencies in a population follow the expected frequencies according to Hardy-Weinberg equilibrium.
7. Paired t-test:
   * Application: Comparing the means of paired samples.
   * Example: Analyzing whether there is a significant difference in the blood pressure of individuals before and after a dietary intervention.

These additional examples cover a range of statistical tests commonly used in various research scenarios. It is important to choose the appropriate test based on the research question, data type, and assumptions.