

Day 8 Cheatsheet

Statistics

Functions

| Library/Package | Piece of code | Example of usage | What it does |
|--------------------------------|---|--|---|
| Base R | <code>cor(x, y)</code> | <code>cor(x, y)</code> | Calculate correlation of two vectors in R. |
| <code>corrplot</code> | <code>corrplot(cor_mat)</code> | <code>corrplot(cor_mat, type = "upper", order = "hclust")</code> | Create a correlation matrix plot. |
| Base R | <code>t.test(x, y)</code> | <code>t.test(x, y, alternative = "two.sided")</code> | Perform one and two sided t tests. |
| <code>broom</code> | <code>tidy(x)</code> | <code>tidy(t_test_result)</code> | Manipulates and tidies up wonky statistical R objects into nice data frames |
| Base R | <code>wilcox.test(x, y)</code> | <code>wilcox.test(x, y)</code> | Calculate non-parametric, Wilcoxon signed rank test, Wilcoxon rank sum test. |
| Base R | <code>shapiro.test()</code> | <code>shapiro.test(x)</code> | Test for normality with Shapiro-Wilk. |
| Base R | <code>ks.test()</code> | <code>ks.test(x)</code> | Test for normality with Kolmogorov-Smirnov. |
| Base R | <code>var.test(x, y)</code> | <code>var.test(x, y)</code> | Compare two variances with Fisher's F-test |
| Base R | <code>chisq.test(x, y)</code> | <code>chisq.test(x, y)</code> | Perform chi squared contingency tables and goodness of fit tests |
| Base R | <code>lm(x ~ y)</code> | <code>lm(x ~ y, data = df)</code> | Fit linear models based on a formula you provide. |
| Base R <code>summary(x)</code> | <code>summary(linear_model_result)</code> | <code>summary(linear_model_result)</code> | Returns a summary of the values in object, including a linear model or other statistical test. |
| Base R | <code>glm(x ~ y)</code> | <code>glm(x ~ y, data = df, family = binomial())</code> | Fit generalized linear models based on a formula you provide. Must specify the error distribution and link function using the <code>family</code> argument. |

* This format was adapted from the cheatsheet format from AlexsLemonade.