Bivariate Analysis Assignment

your name here

# (Q ~ B) Two sample T-Test for Independent Groups

1. **Identify response and explanatory variables**
2. **Visualize and summarise bivariate relationship**
3. **Write the relationship you want to examine in the form of a research question.**

* Null Hypothesis:
* Alternate Hypothesis:

1. **Perform an appropriate statistical analysis.**
   1. Let be
2. **Write a conclusion in context of the problem.**

# (Q ~ C) Analysis of Variance

1. **Identify response and explanatory variables**
2. **Visualize and summarise bivariate relationship**
3. **Write the relationship you want to examine in the form of a research question.**
4. **Perform an appropriate statistical analysis.**
   1. Let be the true mean Let be the true mean Let be the true mean
   2. At least one group mean is different.
5. **Write a conclusion in context of the problem.**

# (B ~ C) Chi-Square test of Association

1. **Identify response and explanatory variables**
2. **Visualize and summarise bivariate relationship**
3. **Write the relationship you want to examine in the form of a research question.**
4. **Perform an appropriate statistical analysis.**
   1. Let be the true proportion of
   2. At least one proportion is different.
5. **Write a conclusion in context of the problem.**

# (Q ~ Q) Correlation Analysis

1. **Identify response and explanatory variables**
2. **Visualize and summarise bivariate relationship**
3. **Write the relationship you want to examine in the form of a research question.**
4. **Perform an appropriate statistical analysis.**
   1. Let be
5. **Write a conclusion in context of the problem.**

# (Q ~ Q) Linear Regression Analysis

1. **Identify response and explanatory variables**
2. **Visualize and summarise bivariate relationship**
3. **Write the relationship you want to examine in the form of a research question.**
4. **Perform an appropriate statistical analysis.**
   1. Let be
5. **Write a conclusion in context of the problem.**