Assignment 5 Template

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<u>Problem 1:</u> Fill in the information below based on your data which were generated using your ID number as the seed for the random number generator.

Insert the table of observed and expected frequencies here.

	Category.1	Category.2	Category.3	Category.4	Category.5	Category.6
Observed	7	18	38	25	54	8
Expected	25	25	25	25	25	25

The hypothesis of interest is that the data arise from a Multinomial model with equal probabilities.

The observed value of the likelihood ratio statistic for testing this hypothesis

= 67.11506

The degrees of freedom for the Chi-squared distribution = 5

The p-value = 4.077849e-13

since the p value is very small and less than 0.05, the hypothesis is likely true.

The observed value of the Pearson Goodness of Fit statistic for testing this hypothesis = 66.88

The degrees of freedom for the Chi-squared distribution = 5

The p-value = 4.563017e-13

since the p value < 0.05, the fit is very good.