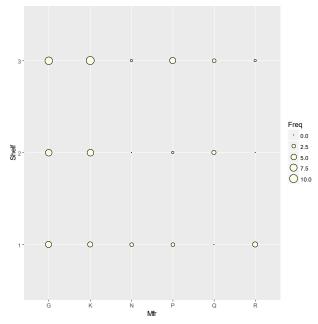
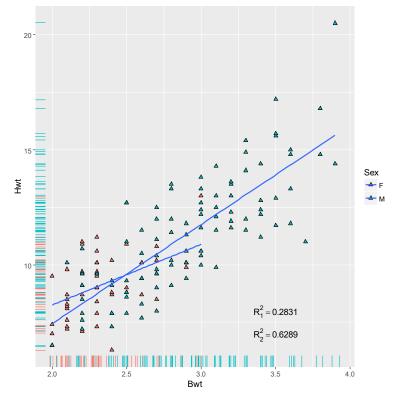
Exercise Scatter Plot and Box Plot

1. Based on the UScereal data set, produce a scatter plot for display shelf (shelf) against manufacturer (mfr) where both these variables are categorical in nature. Varies the size of the plot with the values of the frequency for each category.



2. Produce a scatter plot for heart vs body weights of male and female cats used for digitalis experiments in the cats data set. Fit simple linear regression models to both set of plots and add in the rug plots and values for R² of both models in the plot.



3. Produce the box plot of price against cut for each color of diamonds. Use the diamonds data set. For each group of boxplot, include the violin plot of price against cut. Deal with the overplotting of the outliers in your plot.

