Homework 3 – Linear regression

a) In about 2 paragraphs summarize your answer to the research question based on the

analysis. Mention which predictors turned out to be significant and which not. Offer

possible explanations of why that might be.

What characteristics of a word predict how many associations (on average) a

person makes?

If the amount of syllables is below 3 the associations tend to be higher.

The higher the imageability the higher the association?

The higher the concreteness the higher the association rate, concreteness value of 2.5.

b) For each significant predictor or interaction, describe the kind of effect they have on the

dependent variable.

If the words has 2 or less sylablles is is most likely to have between 5 to 8 associations.

In a lot of languages words with 2 syllables often contain two words with “potential” individual meaning. This could be one explanation for the higher amount of association. Words with more than two syllanles als tend to be more specific and there for allow for less association to be made.

For words that contain between 2 and 9 letter most of them seem to lead to 5 – 8 associations. For longer word associations tend to be between 3 to 6 associations.

The plot about imageability shows a almost linear distribution of the interaction between imageability and association. The higher the value for imageability is, the higher the value for association.

The concreteness doesn’t really seem to directly impact the number of associations being made with a certain word. Most data points are between 5 and 8, regardless of the concreteness value.

c) Finally, mention anything that was surprising or striking to you and suggest one question

or issue for further research.