

# Data Coding Report

## How to use this tool

Coding data is an cyclical process; multiple attempts and refinements at coding data are required in order to be accurate. This tool should be used as a beginning cycle of the data coding process.

Coding data is a highly subjective process; this tool is less subjective, so take what it says with a grain of salt.

Plan to use this tool to help you get started or get unstuck during the coding process. It will give you some suggestions on what to look out for and how to proceed.

## The First Cycle

Often, the first cycle of coding data involves going through each response and abstracting them individually. For example, there may be a long response complaining about the bathrooms in their dorm. This could be coded as “Housing” or “Bathrooms.” Identifying key words such as “dorm” and “bathroom” can be helpful in this first cycle. Below are the top ten keywords identified by this tool.

```
## [1] "topTenKeywords"
```

## The Second Cycle

The second cycle involves grouping together responses based on their similarities. For example, “Bathrooms” and “Kitchens” could be grouped together as “Facilities.” Looking for the relationship between keywords help with this. The relationships between keywords are shown below.

```
## [1] "pcLoadings"
```

So you can get a better idea of how the responses might be grouped, here is a sampling of the groups generated by this tool.

```
## [1] "sampleResponses"
```

## Coding Sentiment

The final step in the coding process is to breakdown the groups by their sentiment. This step is optional, but in certain circumstances it is not enough to know that a response is about “Housing.” The response may indicate that they like or dislike housing, which are very different. This tool categorizes responses as having positive, negative, or neutral sentiment. A list of the most positive and negative responses are listed below. However, coding sentiment should be much easier and more accurate for a human than a computer, so trust yourself.

```
## [1] "greatestSentiments"
```

### **Additional Tips**

- Each of the above steps may take multiple cycles themselves.
- Since coding data is so subjective, be mindful of your own biases and how they might arise when coding.

To help with this, run your coding by another intern to get a fresh pair of eyes. Another intern can check your biases and help contribute to an additional cycle of coding.

For more detailed information about coding qualitative data, see [Coding qualitative data: a synthesis guiding the novice](#)