Project_1

July 30, 2015

1 Read Data and Preprocess

First read the file into program. And prepare each column as a data of list.

```
In [1]: import numpy as np
        import pandas as pd
        f = open("stroopdata.csv")
        data = [[float(line.split(',')[0]), float(line.split(',')[1])] for line in f.readlines()[1:]]
        congruent = [x[0] for x in data]
        incongruent = [x[1] for x in data]
        print "The first column have "+str(len(congruent))+" numbers."
        print "The second column have "+str(len(incongruent))+" numbers."
```

```
The first column have 24 numbers.
The second column have 24 numbers.
```

2 Dependent and In Dependent Variables

As we can see, the data contains two columns of data which are corresponding to two tested cases in this experiment. There are 24 numbers in each column which are corresponding to 24 subjects in the research. These 24 subjects are tested in two cases. And these two cases are independent variable.

Case 1. Subjects are shown words of color to which are painted corresponding. For example, red, blue and black.

Case 2, Subjects are shown words of color to which are painted corresponding not. For example, blue, red and black.

We will refer the paint of the word as inks and the word itself as word. We refer case 1 as congruent case and case 2 as incongruent case.

The length of time is measured for each subject naming the inks of a list of words which both in congruent and incongruent cases. The length of time is dependent variable.

```
In [ ]:
```