**DSC540**

**Week 9 & 10**

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Activity 4. Using one of the datasets provided in Weeks 7 & 8, or a dataset of your own, choose 3 of the following visualizations to complete. You must submit via PDF along with your code. You are free to use Matplotlib, Seaborn or another package if you prefer.

Initial prep steps:

from \_\_future\_\_ import print\_function, division

%matplotlib inline

import matplotlib.pyplot as plt

plt.style.use('seaborn-whitegrid')

import numpy as np

import brfss

import thinkstats2

import thinkplot

df = brfss.ReadBrfss(nrows=None)

def SampleRows(df, nrows, replace=False):

indices = np.random.choice(df.index, nrows, replace=replace)

sample = df.loc[indices]

return sample

sample = SampleRows(df, 50)

heights, weights = sample.htm3, sample.wtkg2

1. Line plot

plt.plot(heights, linestyle='solid')

Chart, line chart

Description automatically generated

1. Scatter plot

thinkplot.Scatter(heights, weights, alpha=1)

thinkplot.Config(xlabel='Height (cm)',

ylabel='Weight (kg)',

axis=[140, 210, 20, 200],

legend=False)

Chart, scatter chart

Description automatically generated

1. Histogram

plt.hist(x=heights, bins='auto', color='#0504aa', alpha=0.7, rwidth=0.85)

Chart, histogram

Description automatically generated