

ACTIVITY 2

PART B – January 16, 2018

Week 3, Tuesday

Due: Thursday, January 18

Instructions: A hard copy of the final version of Activity #2 is due this Thursday (Week 3). This is the second and last part of Activity #2, but it is your responsibility to keep track of all questions on one master document for each respective part

- (1) Flip a coin ten times. Report the result of your coin toss in the following format on your document:

	Count of 10 (Frequency)
4 heads, 0 tails	
3 heads, 1 tail	
2 heads, 2 tails	
1 head, 3 tails	
0 heads, 4 tails	

- (2) We replicated the coin toss across every student in the class. We compared a distribution of ten coin tosses with the distribution of the class. Describe how these distributions differed.
- (3) Using the data below of US senators, determine if Senator Al Franken is more average on the number of years he served OR more average on the bills he passed during this session. In addition, identify if Franken is in the upper 50% of these senators or lower 50% of these senators on these two variables. Show your work. (Note: The standard deviation for years served is 9.03 and the standard deviation for bills passed is 1.37. For simplicity's sake, round to the nearest whole number ($\sigma = 9$, $\sigma = 1$) when using the standard deviation in your calculation.)

	Ted Cruz (R-TX)	Steve Daines (R-MT)	Joni Ernst (R-IA)	Al Franken (D-MN)	Angus King (I-ME)	John McCain (R-AZ)	Rand Paul (R-KY)	Thom Tillis (R-NC)
Political Party (1=Republican; 2 = Democrat; 3 = Independent)	1	1	1	2	3	1	1	1
Gender (1 = Male; 0 = Female)	1	1	0	1	1	1	1	1
Years served	3	3	1	6	2	28	4	1
Bills passed for this session	3	3	1	1	0	5	3	0

- (4) Using the class dataset in SPSS, determine if Student (ID#1) is more average on their midterm score OR more average on their homework score.
- (5) Is Student (ID#1) in the upper 50% or lower 50% of students on each their midterm score and homework score?