Assignment #1

Names:

Part One: From Question to Hypothesis

With your partner, share your “brainstorming” ideas for interesting research questions that you may want to work towards as a part of your final projects (don’t worry, you don’t have to commit to something just yet!)

Ideally, research should focus on questions of the highest importance. The conscientious researcher always tries to answer the most important questions first.

Unfortunately, the most important questions cannot always be answered given our limited resources and limited understanding. Instead, we might focus on answering questions for which we have the skills and resources to answer. Sometimes, these questions might seem trivial or uninteresting.

The best research endeavors to connect good “top-down” questions with good “bottom-up” research resources. Empirical research methods can provide helpful resources for answering questions about music, but these methods should not dictate our research agendas. In learning how to use do empirical research, it is equally important to learn to ask creative questions about music. The purpose of this task is to get you thinking about larger issues in computational analysis for music, and to become excited about carrying out this research. As a researcher, what do you *really* want to know?

Between the two of you, come up with at least THREE and up to five questions that you think are really interesting and list them below.

1.

2.

3.

4.

5.

Of your questions, pick *one* that you both agree is the most interesting of the questions that seem *feasible* (acknowledging that you may not know what skills you will acquire yet! Use your best judgement.) This will be the question that you use to complete the remainder of this assignment.

From your selection, work towards brainstorming (theoretically) *testable hypotheses* that stem from the question. A good method for this is to work from the question towards a theory or conjecture that stems from the question. Recall that a conjecture is a speculative claim (i.e., “probably…”, while a theory is an explanatory framework (i.e., “because…”). None of this has to be based in any kind of fact, you are free to draw on your own intuition at this stage.

Part Two: Sampling

1. Given your question of interest, what is the *population* of interest?
2. Without worrying about what is possible or not, how would you obtain a sample that is *representative* of this population? In other words, what would you sample, and which sampling method would you use? *N.B.: before you think about sampling you may have to operationalize a bit. Make notes.*
3. Explain your rationale for the sample selection and method. (Note you can do this “inline” above if it is easier)

Part Three: From Hypothesis to Operationalization

1. Given your hypothesis that your group came up with, what terms will need to be defined operationally? Write those below. Think through how your decisions might affect the outcomes to your question. Take notes to recall why you may have “thrown out” some option or idea (you may forget later and have to do it all over again!)
2. Write down all necessary operational definitions below (you should have at least 1-2 and possibly many more.)