This week, I created the ER diagram from a spreadsheet of BLM with Kumbula who had worked on analyzing the spreadsheet over the summer. I first read through the spreadsheet to understand it, and after that I met with Kumbala who was the client I was building a database for. From what I understood, the spreadsheet was a collection of universities and other organizations that have said or made a statement in relation to the murder of black people by the cops. The spreadsheet was divided into universities, non-profit organizations, research communities, professional societies and even design communities. Furthermore, the spreadsheet also had columns for the URL of the aforementioned organizations. It also had other columns such as “Racism”, “breonna” and text, and the columns had true or false depending on if a particular word appeared in the text made by the organization. After I understood the spreadsheet to this extent, I went down to begin creating an ER diagram. An ER Diagram is a type of flowchart that shows the relationship between entities and attributes through cardinalities.

To create this I knew that the entities in the ER diagram which were the boxes were the rows in the spreadsheet and that the attributes were the columns. So I first started by taking the names of all the different universities, professional societies and research communities and putting each of them into a different box. This was very stressful as there were about 300 rows, and with this method it implied I had to make 300 boxes. I knew that in computer science, we always try to save as much time as possible instead of repeating code (the reason why we have loops). So I knew there was probably a better way of doing it. I then went to Youtube and found a good video that showed the concept better. I realized that instead of writing each university, professional society etc out and have each one into a box, I could just categorize them all. So I could have Berea, University of Lexington, Eastern Kentucky University under the category of Universities and I could have NSBE, GHC as under professional organization. These then would make up two entities, which would be two different boxes. Through this way, I divided the spreadsheet into 4 entities and inside the entity boxes I had their attributes which were the rows.

After this, the next thing I had to do was find the relationships between these entities. For instance, the relationship between a university and a professional society would be many to many from both sides. A university could have many professional societies and a professional society would have many universities. I did this for all the entities I had and used the cardinalities to show how each one related to each other.

I am glad about all I did this week, because I understood how ER diagrams work, I was able to create one and create the logic of the relationship (I hope correctly). I was also able to work and collaborate with another student and we both brainstormed together which is a good thing to do in computer science