Assumption for Homework 1:

- Zip code area are very vaguely described, so I use the area_name attribute as the primary key
- Vehicle and Equipment are described together as one object, but two of them have different unique id and attributes, so I decided to let them have a "Machine" relationship and aggregate so other entities can have relationship with both of them
- I assume each project must have at least one or more experiments but each experiment can only be part of a single project because otherwise it wouldn't make sense to have two projects working on the same experiment
- I assume that there could be multiple people living in the same address (like a married couple), but each person can only live at a single address
- It is unclear how many projects a person can take up and how many can work on a project so I assume that many project can be worked on by multiple people, but those people are committed to just those projects because why else would I recorded them if they don't work on the projects
- I also assume that each project must contains at least one or more experiment because otherwise there is no reason to record it
- For the role that each personnel must choose with respect to the project (principal-investigator, project manager, assistant, and field engineer), it makes no sense to assign the relationship with all of these as attributes so I create an attribute call role_description that houses all of these attributes
- For borehole, though it wasn't specified I assume that a drilled borehole can only be part of one mission because it wouldn't make sense to drill the same borehole twice two different mission
- For the mission - experiment relationship, I'm unsure whether the same mission can be used for multiple experiments. Each of the mission and experiment are unique so it's unlikely that the same mission can accurately describe or configure two different experiment, therefore I make sure that one mission can only be part of that experiment, but a single experiment can have multiple missions