



EER Update

- Mandatory line from appliance entity to associated with relationship. Single line from Associated relationship to Manufacturer.
 - Appliance must have a manufacturer name according to the problem statement
- Water heater, Air handler, Air conditioner, heater, Heat pump changed to weak entities.
 - These entities cannot be uniquely identified by its attributes alone. Plus it was inherited from the weak identity Appliance.
- Relationship between Household to Power Generation change to “1 to Many” from “Many to Many”
 - Off the grid means that the household is not physically hooked up to wire/pipes cables/ but the household is using its "own" power.
 - When a household uses its "Own", "Private" utility, we can assume that other households are essentially NOT "sharing" it because that would defeat the purpose of the power generation being a "private/off-the-grid".
- Heating and Cooling changed to weak entities with Temperature being weak attribute.
 - - Multiple households can set there thermostat settings to be the same temperature(i.e Household A and Household B will have 0C as there cooling thermostat settings)
 - Just looking at the temperature value, we don't know if a particular temperature belongs to a particular household.
 - Since we only have temperature as the only attribute for the cooling and heating table, there are no other good attributes that can be served as the primary key for each table.
 - Thus, making it weak entity, and then combining email and temperature attribute and making it as the PK makes sense.
- Added address_id attribute for Table
- Added Appliance_type for Appliance Table that would help us determine which type of appliance this is (water heater, air handler, etc) and point to the correct appliance type when querying.