1. While it is a bad idea to use someones ssn as a primary key, in this situation it seems to be the only option since it is the only attribute that describes a person uniquely as different people could have the same name or age and multiple people could live at the same address.
2. An example of an insertion anomaly is that you would not be able to insert a new country into the table without having information about one of the residents of that country. An example of a deletion anomaly is that when trying to remove a person it could result in a country being deleted from the table as well if no other people in the database reside in that country. An example of an is that all residents have an instance of their countries population so in order to avoid an update anomaly all instances of the countries population need to be updated.

Person: age can be determined from DofB and what country they live in can be determined by city code

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SSN** | Name | DofB | Add | *Cty Code* |

City: state code always you to find which state the city is in an eventually what country

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | Name | Size | *State code* |

State: the size of a state can be determined by the sum of the size of the cities that exist in the state. Con ID always you to determine which country the state resides in.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Code** | Name | Rgn | Pop | *Con ID* |

Country: The size of a country can be determined by the sum of the size of the states, which is a sum of the size of its cities. The population of a country can be determined by the sum of the population of its states.

|  |  |
| --- | --- |
| **ID** | Name |

4)