1. I would choose the PerSSN to be the primary key of the Person table. I choose this because every person in the world would have a different SSN. Thus, this would insure that every row in the table would be unique.
2. Insertion Anomaly:

In order to figure out an insertion anomaly, we must first see what our primary key is. Our primary key is PerSSN. So, an example of an insertion anomaly would be this: Adding a city without adding a person who lives in that city. You cannot do this because a primary key cannot be null. Therefore, if we just added a city and left it empty with no person in it, it would be an anomaly.

Delete Anomaly:

If there is only one person in a city, if we delete this person from the city, then we would also lose information about the city that this person lived in. Again, we cannot set PerSSN to be null to represent the person is dead, as the primary key is not allowed to be null.

Update Anomaly:

Let us say that a country has been taken over by another country. This calls for a rename of the country. However, if we want to rename the country in the database, then we must also change all the people living in that country to the new country name as well.

1. Underline refers to primary key. \* refers to foreign key

Table 1: PERSON(PerSSN, PerName, PerDofB, PerAdd, CtyCode\*)

Table 2: CITY(CtyCode, CtyName, CtySize, StateCode\*)

Table 3: STATE(StateCode, StateName, StateRgn, ConID\*)

Table 4: COUNTRY(ConID, ConName)

