

## Exercise 2

1.

- A. **Agree**. Every person can be the child of at most one other person. This is due to the key constraint from Person to ChildOf.
- B. **Agree**. Because people in the real world do not actually have a personID so this has been artificially created to identify between two people in the database.
- C. **Disagree**. There is no information in the diagram that supports this. Perhaps it would be necessary to add an attribute on ChildOf relation to enforce this.
- D. **Disagree**. There is no constraint that shows in relation ChildOf, personID not equal parentID. Due to lack of constraint, it is possible for personID = parentID.

2.

- A. **Disagree**. Doing that would mean all deposits would show as one entry between the customer and his/her account so individual deposits made by the customer would not be trackable but perhaps the sum of all deposits would still be trackable.
- B. **Agree**. Because in a make deposit relation as it is now, a single depositid can be linked to multiple customers and accounts, as long as there is one linked to it.
- C. **Disagree**. It is necessary because without it, A customer can make a deposit to his/her account without the deposit being recorded. An empty deposit would not make sense.
- D. **Disagree**. Because in that case a unique customer would be able to have only one deposit entry to a unique account and hence it would make the Deposits entity set useless.