Assignment 7: Database Design

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Task 01:

The relationship was not established correctly. Because all of the data in the column should be uniquely identified by the primary key. The number 104 were duplicated in the column of RoomNum.

Task 02:

The relationship was not established correctly. The expression of "500-599" in the column of RoomNum was not suitable for the type.

Task 03:

- A) The "500-599" and duplicated 104 of RoomNum could potentially lead to errors in the data.
- B) The front desk personnel could be impacted by the duplicated guests on the same room number.
- C) The type and price column in the HOTELROOM table were the redundancy.
- D) We need to add a new table BOOKING in these table and remove Guest column from HOTELROOM table so that the table structures could be less redundancy. The new table BOOKING has RoomNum column, Guest column and Date column.

Task 04:

HOTELROOM(RoomNum, type, price)

Primary Key: RoomNum Foreign Key: RoomNum

GUEST(GuestNum, name, address)

Primary Key: GuestNum Foreign Key: GuestNum

BOOKING(RoomNum, GuestNum, Date) *Primary Key:* GuestNum, GuestNum, Date