Customer (CID, CName\*, Street\*, City\*, CState\*, ZIP\*)

CKs: CID&CName

**3NF:** the table is currently in the 3NF state where no NKAs depend on anything other than a CK  
 - ZIP🡪CState&CCity: a ZIP code will determine the location of a city and of a state

Customer (CID, CName\*, Street\*, ZIP\*)  
CustCity (ZIP, City\*, CState\*)  
*ZIP references Customer.ZIP*

**BCNF:** the table now contains the key attribute CName depending upon the key attribute CID  
 - CID🡪CName

Customer (CID, Street\*, ZIP\*)  
CustCity (ZIP, City\*, CState\*)  
*ZIP references Customer.ZIP*CustName (CID, CName\*)  
*CID references Customer.CID*

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Room (RoomNum, RType\*, RPrice\*, [Popularity])

**2NF:** the table is currently in the 2NF state where no NKAs depend on a part of a CK  
 - RType🡪Popularity

Room (RoomNum, RType\*, RPrice\*)   
RoomPop (Type, [TypePopularity])  
*Type references Room.RType.*

**3NF:** the table is currently in the 3NF state where no NKAs depend on anything other than a CK  
 - RType🡪RPrice

Room (RoomNum, RType\*)   
RoomPop (Type, [TypePopularity])  
*Type references Room.RType.*  
RoomPrice (Type, TypePrice\*) *Type references Room.RType.*

**BCNF:** the result of 3NF made it so that the Room table contains only KAs that don’t depend on each other, which makes the table complete.

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Reservation (ResID, CID\*, RID\*, CheckInDate\*, CheckOutDate\*, [DaysIn]\*, [BillAmt]\*)  
CID references Customer.CID  
RID references Room.RoomNum

**2NF:** the table is currently in the 2NF state where no NKAs depend on a part of a CK  
 - CheckInDate🡪DaysIn & CheckInDate🡪BillAmt

Reservation (ResID, CID\*, RID\*, CheckInDate\*, CheckOutDate\*)   
ResBill (CheckInDate, CheckOutDate, [DaysIn]\*, [BillAmt]\*)  
*CheckInDate references Reservation.CheckInDate  
CheckOutDate references Reservation.CheckOutDate*

**3NF:** the table is currently in the 3NF state where no NKAs depend on anything other than a CK  
 - ResID🡪CheckInDate & ResID🡪CheckOutDate

Reservation (ResID, CID\*, RID\*)   
*CID references Customer.CID  
RID references Room.RoomNum*  
ResDate(ResID, CheckInDate\*, CheckOutDate\*)  
*ResID references Reservation.ResID*  
ResBill (CheckInDate, CheckOutDate, [DaysIn]\*, [BillAmt]\*)  
*NOW CheckInDate references ResDate.CheckInDate  
NOW CheckOutDate references ResDate.CheckOutDate*

**BCNF:** the result of 3NF made it so that the Reservation table is finalized in this form