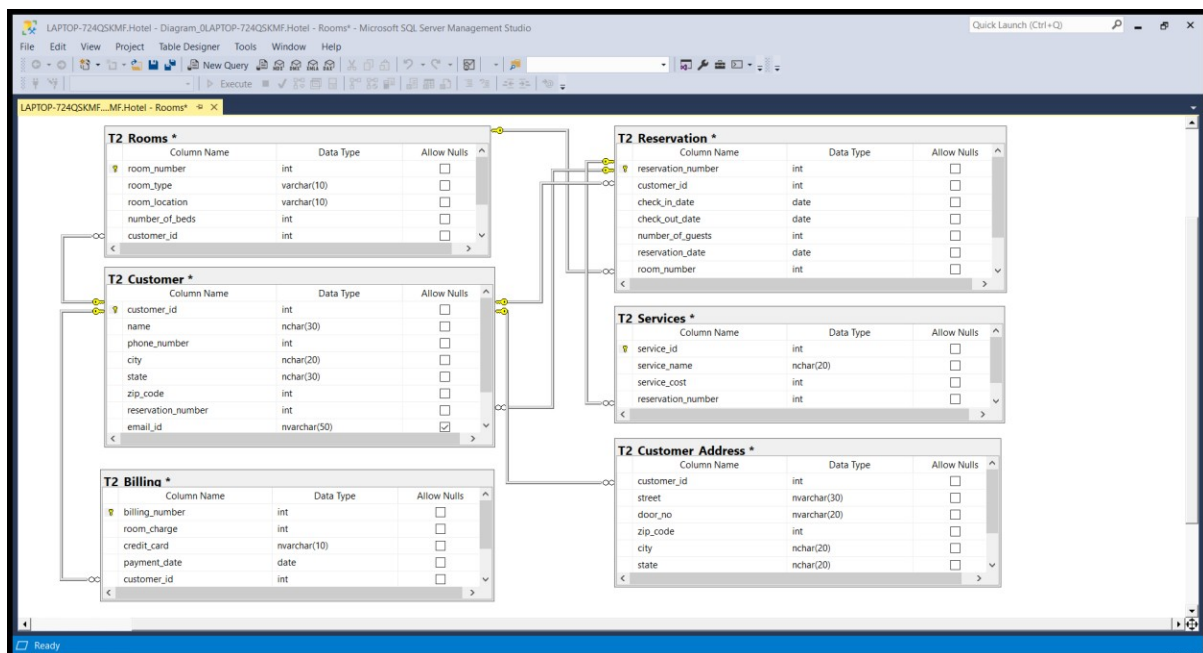# DBMS LAB ASSIGNMENT 1

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Team No. : 2
Database : Hotel

E.R DIAGRAM :

Q) What is a strong Entity ?
A **strong entity** set is an **entity** that contains sufficient attributes to uniquely identify all its **entities**. Simply **strong entity** is nothing but an **entity** set having a primary key attribute or a table which consists of a primary key column

What is a weak entity?

In a relational database, a weak entity is an entity that cannot be uniquely identified by its attributes alone; therefore, it must use a foreign key in conjunction with its attributes to create a primary key. The foreign key is typically a primary key of an entity it is related to.

Weak entity in our ER model :

In the below ER diagram the entity "T2_Customer_Address" is a weak entity because it can't be uniquely identified with its own attributes. As we could notice that there is no separate primary key for this entity. The 'customer_id' key acts as primary key and foreign key for the "T2_Customer_Address" entity. This entity is completely dependent on the "T2_Customer" entity's primary key i.e., 'cutomer_id'.

So, the entity "T2_Customer_Address" is the weak entity and the relation it shares with the "T2_Customer" entity is the weak relationship. i.e., Strong Entity: **T2_Customer** – Independent and has a key attribute i.e., a primary key.

Weak Entity: **T2_Customer_Address** – Dependent and does not have a primary Key.

Table Name	Primary key	Foreign key
T2_Rooms	Room number	Customer ID
T2_Customer	Customer ID	Reservation number
T2_Reservation	Reservation number	Room number, Customer ID
T2_Services	Service ID	Reservation number
T2_Billing	Billing #	Customer ID
T2_Customer Address	Customer ID	Customer ID