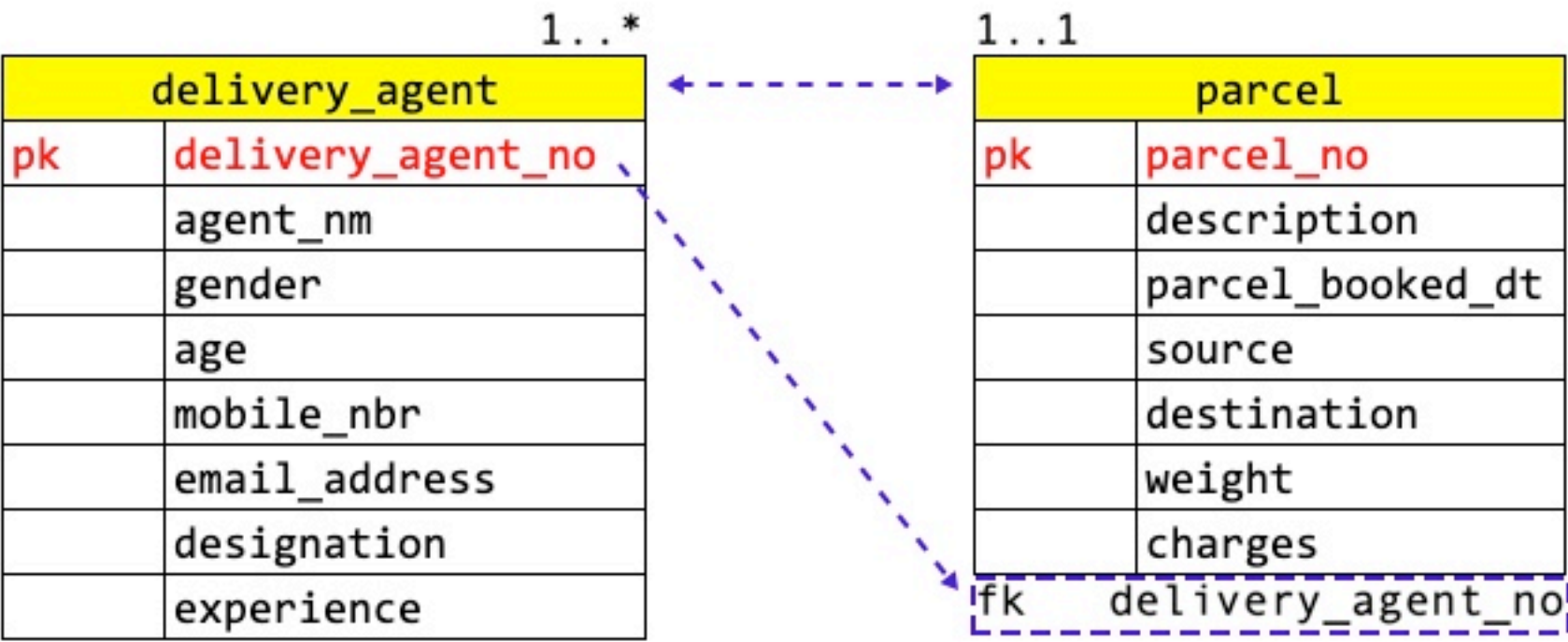


#1. one-to-many relationship

Each record in my table is in relationship with multiple/many records of another table, then the tables are said to be in one-to-many relationship.
Note:- Always the relationships are derived based on business assumptions only.

Rule:-

- 1. For the table to participate in relationship with other table, it should have an primary key column.
 - 2. Read the relationship between the tables from both the ends.
 - 3. while reading the relationship, always consider one record of my table is in relationship with how many records of another table
- Let us consider an example below to understand:



- one delivery agent can delivery many/multiple parcels (1..*)
- one parcel is delivered by only one agent (1..1)

so by reading from both the sides of the relationship we can understand the tables should be in one-to-many relationship.

How to establish one-to-many relationship between these 2 tables?

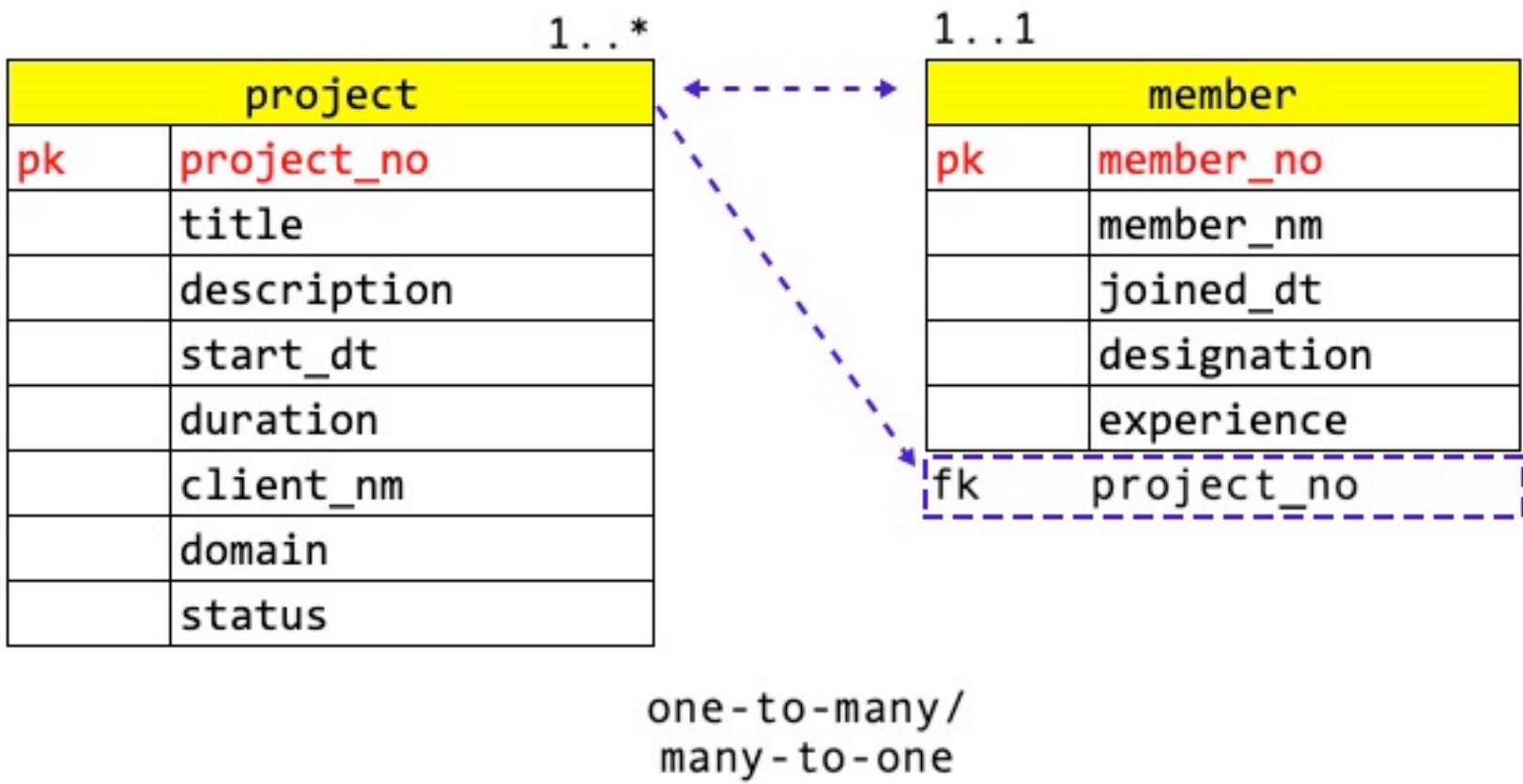
To establish relationship between the tables, we need to write primary key of one table as an foreign key in another table. Here we can write either **delivery_agent_no** (pk) of **delivery_agent** table as **foreign_key** in **parcel** or **parcel_no**(pk) of **parcel** table can be written as foreign key in **delivery_agent** table

Let us understand which one will works:

- 1. **parcel_no** (pk) of **parcel** table as **foreign_key** in **delivery_agent** table:
if we write **parcel_no** (pk) as foreign key in **delivery_agent** table, the a delivery agent can only deliver one parcel in his lifetime, this is wrong option

- 2. **delivery_agent_no** (pk) of **delivery_agent** table as **foreign_key** in **parcel** table:
if we write **delivery_agent_no** (pk) as foreign key in **parcel** table, then each parcel is delivered by only one **delivery_agent** and a **delivery_agent** can deliver many parcels. Correct Choice.

#2 example



From the above examples we can derive always the foreign key column will be exists on the many-side of the relationship