

one-to-many

each record in my table is in relationship with many/multiple records of their table, then the tables are said to be in one-to-many relationship.

Let us consider #2 tables publisher and book. Here a Publisher can publish many books, but always a book is published by only one publisher. so based on this we can derive the relationship between these 2 tables as one-to-many and many-to-one

How to represent or establish the relationship between these 2 tables?

- here we have #2 possibilities in establishing the relationship
1. publisher_no (pk) can be written as foreign key in book table
 2. book_no (pk) of book table, can be written as foreign key in publisher table.

publisher	
pk	publisher_no
	business_nm
	established_dt
	contact_no
	email_address
	street_address
	city
	state
	zip
	country

book	
pk	book_no
	title
	description
	author_nm
	genere
	isbn_no
	published_dt
	price

2. book_no (pk) of book table can be written as foreign key in publisher table:

if we write book_no (pk) as foreign key in publisher table, then one publisher can publish only one book because per each publisher record we can have only one book_no being written in its fk column as below.

publisher_no	publisher_nm	book_no
p1	wrox		b1
p2	pbp		b2

1. publisher_no (pk) of publisher table as foreign key in book table

if we write publisher_no(pk) as foreign key in book table, then per each book, it can be published by one publisher. In this way many books can be published by same or different publishers as well. This means one publisher can publish multiple books

book_no (pk)	title	publisher_no (fk)
b1	harry potter	p1
b2	lion king	p3
b3	let us c	p1
b4	pointers in c	p2
b5	treasures in c	p3
b6	complete reference java	p1
b7	wings of fire	p1

p1 = published 4 books

p2 = 1 book

p3 = 2 book

In this way we can represent one publisher publishing multiple books.

So always the table that holds the foreign key column represents the many side of the relationship. here book table has the foreign key column publisher_no so book is representing many side of the relationship

one publisher can publish many books.