<u>direct one-to-one</u>

2 tables are said to be in one-to-one relationship, when a record in one table is in relationship with only one record of another table.

In case of direct one-to-one relationship between the tables:

- 1. The child/dependent table doesnt have independent identity of its own.
- 2. The records in child/dependent table doesnt have existence without the record in the primary key/parent table

For eg.. between auto_loan and loan_disbursement tables

1. auto_loan table: loan_no is the identity or primary key column

For each loan that is created/applied, when it is approved, the loan will be disbursed, so the dis-bursement information will be stored aspart of loan_disbursement table.

For each loan that is issued, there will be only one loan_disbursement information will be there (or) every loan_disbursement is done for only one loan. So the relationship between these 2 tables is one-to-one.

But if we observe the loan_disbursement doesnt have:

- 1. its own identity, we don't need any disbursement_no for the data that we store in loan_disbursement table. Always we search for disbursement information for a loan using loan_no itself
- 2. There will be never a record in the loan_disbursement table, unless we have an corresponding record in loan table.

Based on these above aspects we can think of establishing the one-to-one relationship between these 2 tables:

1. by writing loan_no (pk) of loan table as primary key of loan_disbursement table: because loan_disbursement also is identified based on loan_no only 2. along with this we need to make loan_no in loan_disbursement table as foreign key because unless there is a record in loan table we cannot have a record in loan_disbursement

so based on this, the tables looks as below.

	11		11		
auto_loan		←	loan_disbursement		
pk	loan_account_no		pk, fk	loan_account_no	
	applicant_nm			account_no	
	sanctioned_dt			vendor_nm	
	loan_type			disbursed_amt	
	tenure			disibursed_dt	
	sanctioned_amt			bank_nm	
	interest_rate			ifsc_code	
	status		V.T	-	

- 1. by writing loan_account_no as fk we are enforcing the constraint saying there can be loan_disbursement only when there is an loan
- 2. since loan_disbursement doesnt have separate identity and there exists only one loan_disbursement for a loan we are making even the foreign key as primary key

	11		11		
bill		+		itemized_bill	
pk	bill_no	1979	pk,	fk	bill_no
	bill_dt				local_call_mins
	due_dt				international_call_mins
	subscriber_nm				local_sms
	plan_nm				international_sms
	subscriber_type				data_usage_in_mb
	circle				
	bill_amount				