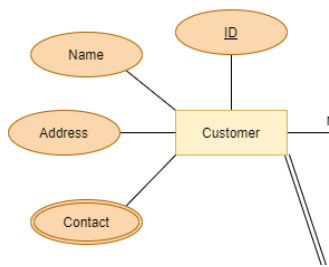## Step 1 : Mapping of Regular Entity Types.

Customer Entity
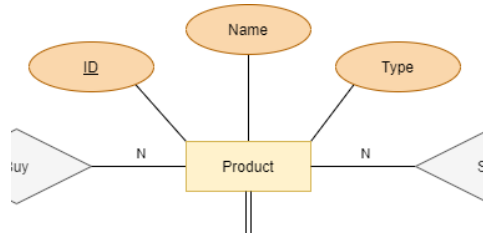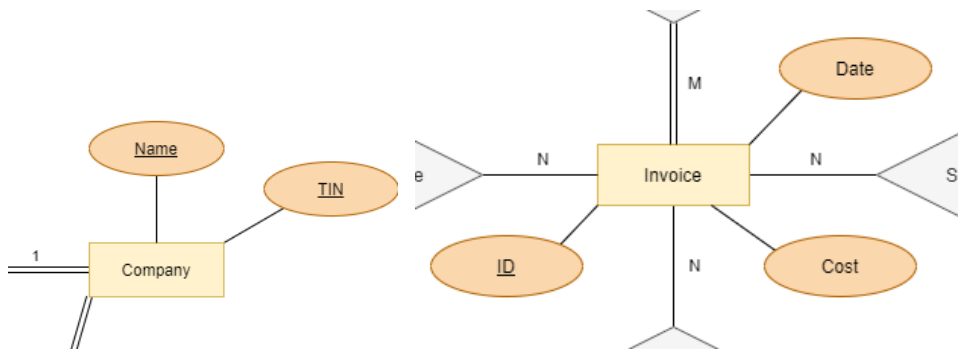
Name — ID — Address — Customer — Contact

Product Entity

ID — Name — Type — Product — Buy (N) — Se (N)

Company Entity

Name — TIN — Company (1)

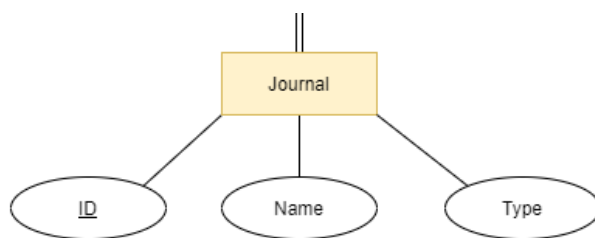**Invoice Entity**

Date — M — Invoice — N — Se — ID — N — N — Cost

Journal Entity

Journal — ID — Name — Type

Customer

cID	cName	Address

Product

pID	pName	pType

Company

companyName	TIN

Invoice

invoiceID	Cost	Date

Journal

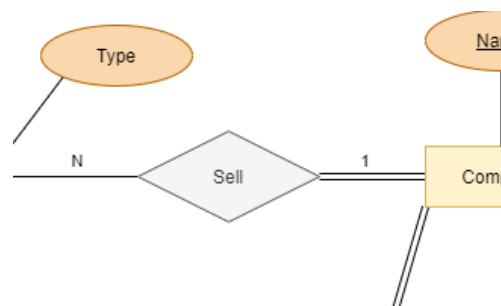| jID	jName	jType

Step 2 : Mapping of Weak Entity Types.

None

Step 3 : Mapping of Binary 1:1 Relation Types.

None

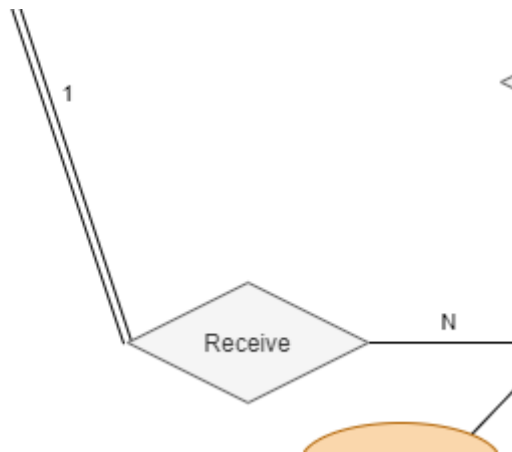**Step 4: Mapping of Binary 1:N Relationship Types.**

Sell Relationship

Product

pID	pName	pType

pID	pName	pType	TIN

Receive Relation

Invoice

invoiceID	Cost	Date

invoiceID	Cost	Date	cID
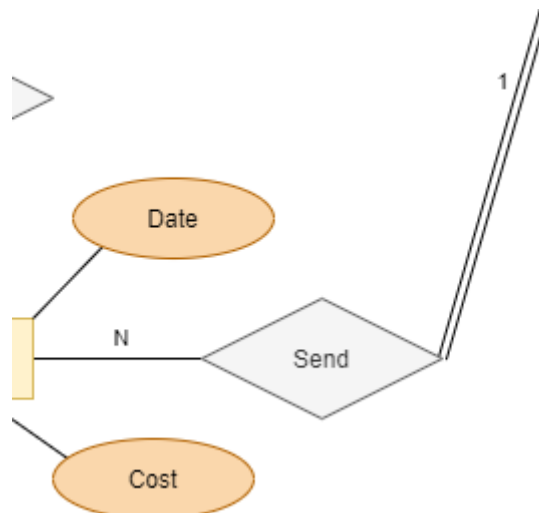
Send Relationship

Invoice

invoiceID	Cost	Date	cID

invoiceID	Cost	Date	cID	TIN
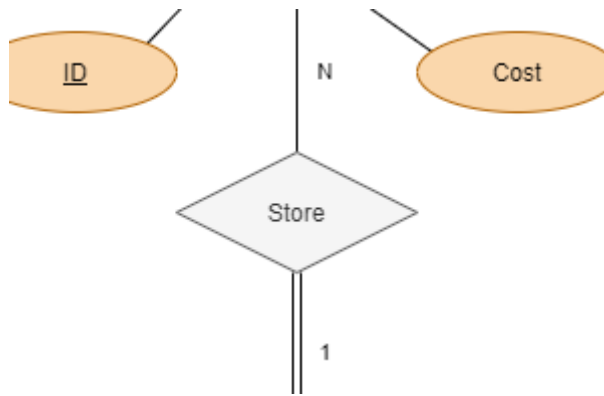
Store Relationship

Invoice

invoiceID	Cost	Date	cID	TIN

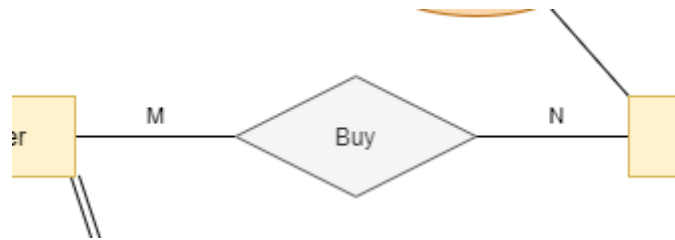| invoiceID	Cost	Date	cID	TIN	jID

Step 5: Mapping of Binary M:N Relationship Types.
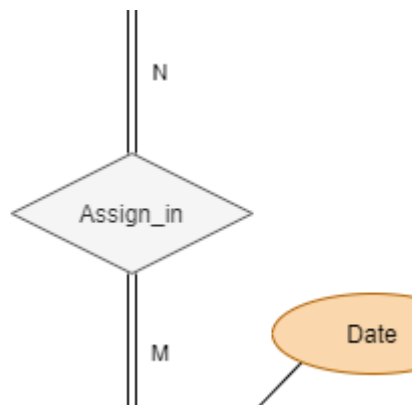
Assign_in Relationship
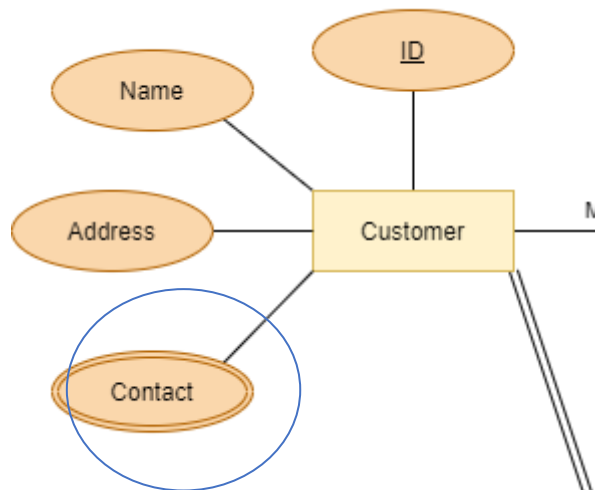
Assign_in

pID	invoiceID

Buy Relationship

Buy

cID	pID

Step 6: Mapping of Multivalued attributes.

Contact Attribute

Contact

cID	cContact

Step 7: Mapping of N-ary Relationship Types.

None

Step 8: Options for Mapping Specialization or Generalization.

None

Step 9: Mapping of Union Types (Categories).

None

Result of mapping ER schema into a relational database

Customer

cID	cName	Address

Product

pID	pName	pType	companyName

Company

companyName	TIN

Invoice

invoiceID	Cost	Date	cID	TIN	jID

Journal

jID	jName	jType

Buy

cID	pID

Assign_in

pID	invoiceID

Contact

cID	cContact