# Mapping the ER model to the relational model

Step 1: Map Entities

#### Map 1:1 relationship’s

Performer (Emp No, Name, Address, Bank BSB, Bank ACC)

Cruise (Cruise ID, Start Port, Destination Port, Start Date, End Date)

Show (Title, Duration, Type)

#### Map weak entities

Performance (Show\_Title, Notes, Start Time, Classification)  
Together (Title, Start Time) form the primary key of the new relation (underlined)

Step 2: Map Relationships

#### Map 1:1 relationship’s

Performer (Emp No, Name, Address, Bank BSB, Bank ACC)

Cruise (Cruise ID, Start Port, Destination Port, Start Date, End Date)

Show (Title, Duration, Type)  
Performance (Notes, Start Time, Classification, Show\_Title\*, Cruise\_ID\*, ParticipateGroudID\*)

#### Map 1:n relationship’s

None

#### Map N:M relationship’s

Works On (Emp\_No\*, CruiseID\*)  
*Together Emp\_No and CruiseID create a composite key*  
  
Participate (Emp\_No\*, ParticipateGroup)  
*Together Emp\_No and ParticipateGroup create a composite key.*

Step 3: Map multivalued attributes

No multivalued attributes

Step 4: Map higher degree relationships

**No higher degree relationships**

Step 5: Final Schema

Performer (Emp No, Name, Address, Bank BSB, Bank Acc)  
Cruise (Cruise ID, Start Port, Destination Port, Start Date, End Date)  
Performance (Notes, Start Time, Classification, CruseID\*, ShowTitle\*, ParticipoateGroupID\*)  
Show (Title, Duration, Type)  
Works On (EmpNo\*, CruiseID\*)  
Participate (EmpNo\*, ParticipateGroup)