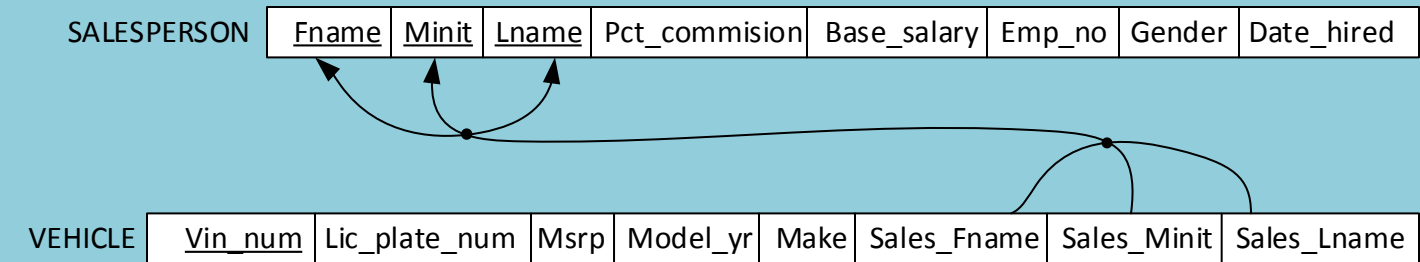


You only had to do one of the following three solutions for problem 23:

23a. directed arcs



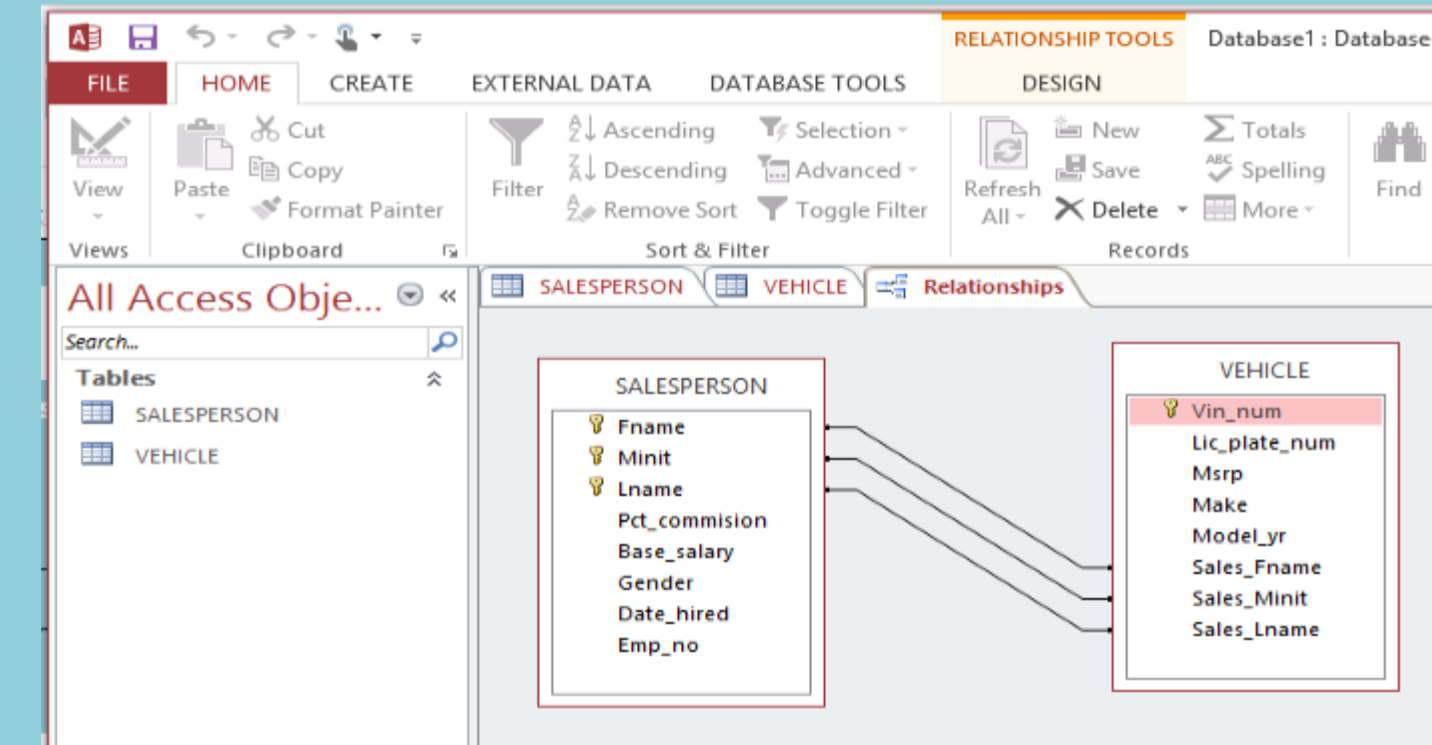
23b. in terms of inclusion dependencies

SALESPERSON(Fname, Minit, Lname, Pct\_commission, Base\_salary, Emp\_no, Gender, Date\_hired)

VEHICLE(Vin\_num, Lic\_plate\_num, Msrp, Model\_yr, Make, Sales\_Fname, Sales\_Minit, Sales\_Lname)

# VEHICLE.{Sales\_Fname, Sales\_Minit, Sales\_Lname} ⊆ SALESPERSON.{Fname, Minit, Lname} or ∅

23c. from MS Access



24. Metadata for Relation Schema in problem 23

ENTITY_TYPE	NAME	DATATYPE	DATASIZE	PRECISION	REQUIRED?	COMMENT
SALESPERSON	Fname	Alphabetic	20		Y	
SALESPERSON	Minit	Alphabetic	1		N	
SALESPERSON	Lname	Alphabetic	20		Y	
SALESPERSON	Pct_commission	Numeric	2	2	N	
SALESPERSON	Base_salary	Numeric	6	0	Y	
SALESPERSON	Date_hired	Date	8		Y	
SALESPERSON	Gender	Alphabetic	1		Y	
VEHICLE	Vin_num	Alphabetic	30		Y	unique id
VEHICLE	Lic_plate_num	Alphabetic	7		Y	
VEHICLE	Msrp	Numeric	7	2	Y	
VEHICLE	Model_yr	Numeric	4		Y	
VEHICLE	Make	Alphabetic	13		Y	
VEHICLE	Sales_Fname	Alphabetic	20		Y	
VEHICLE	Sales_Minit	Alphabetic	1		N	
VEHICLE	Sales_Lname	Alphabetic	20		Y	