

### 3.6 Relational Data Bases

Exercises #13-20 all, 22-23 all

Day 2

(13) TEMP = SUPPLIER[AMOUNT >= 100]  
TEMP [Part No]

→ 335B2, 8C200, 900, 20A8, 1199C

(14) TEMP = BUYER[NAME = DANVY'S]  
TEMP2 = TEMP [TEMP.<sup>TEMP</sup> PART NO = SUPPLIER.<sup>SUPPLIER</sup> PART NO.] SUPPLIER  
TEMP2 [Dept]  
→ 04, 96

(15) TEMP = BUYER[NAME = UNITED SUPPLIES]  
TEMP2 = TEMP [TEMP.Part No. = Supplier.Part No] SUPPLIER  
TEMP3 = TEMP2 [part No., Amount]  
→ (24, 14) (1199C, 296) (335B2, 220), (772, 39)  
\* I think these values are not how many United Supplies  
(2<sup>nd</sup> number)  
bought, but the numbers represent how many the  
Supplier has.

(16) TEMP = BUYER[ABC unlimited]  
TEMP2 = TEMP [TEMP.Part No = Supplier.Part No] SUPPLIER  
TEMP3 = TEMP2 [TEMP2.Part No = Department.Part No] Department  
TEMP3 [Manager]  
→ Xu, Jones, Zamora

(17) Temp = BUYER [NAME = JCN Electronics]  
 Temp2 = Temp [Part No = Part No] Supplier  
 Temp3 = Temp2 [Temp.Dept = Department.Dept] Department  
 Temp4 = Temp3 [Manager = Employee.Manager] Employee  
 Temp4 [Name]  
 → Kaminski, Schmidt, Mancotti

(18) Temp = Department [Manager = Jones]  
 Temp2 = Temp [Dept = Supplier.Dept] Supplier  
 Temp3 = Temp2 [Part No = BUYER.Part No] BUYER  
 Temp4 = Temp3 [Name]  
 → United Supplies, JCN Electronics, ABC unlimited

(19) Temp = Employee [Name = Suzuki]  
 Temp2 = Temp [Temp.Manager = Department.Manager] Department  
 Temp3 = Temp2 [Dept = Supplier.Dept] Supplier  
 Temp4 = Temp3 [Part No = Buyer.Part No] Buyer  
 Temp4 [Name]  
 → underhanded Sales, Danny's, ABC unlimited, United Supplies

(20) Temp = Department [Manager = Zamora]  
 Temp2 = Temp [Dept = Supplier.Dept] Supplier  
 Temp2 [Part No, Amount]  
 → (20AB, 200), (119AC, 296)

②② union  $\rightarrow$  item in  $R_1$  or  $R_2$

Temp = Department [Dept = 23]

Temp2 = Department [Dept = 96]

Temp3 = Temp union Temp2

Temp4 = Temp3 ['Manager = Employee, Manager] Employee

Temp4[Name]

$\rightarrow$  Kaminski, Schmidt, Manacotti, Suzuki

②③ intersection  $\rightarrow$  item in  $R_1$  AND  $R_2$

Temp = Buyer [Part No = 2A]

Temp2 = Buyer [Part No = 1199C]

Temp3 = Temp [Name]

Temp4 = Temp2 [Name]

Temp5 = Temp3 intersect Temp4

Temp5[Name]

$\rightarrow$  United Suppliers