P & E #8-50 page 378 Given the attributes for STORE, EMPLOYEE, DEPARTMENT and SCHEDULE.

We can show the attributes for each of these stated in P & E #8-50 on page 378 to have the following schema:

### STORE

Store ID Reg	on ManagerID	SquareFeet
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### **EMPLOYEE**

EmployeeID WhereWork EmployeeName EmployeeAddress
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## DEPARTMENT

<u>DepartmentID</u>	<u>ManagerID</u>	SalesGoal

# SCHEDULE

<u>DepartmentID</u>	EmployeeID	Date

# 3 Cases for Denormalization :

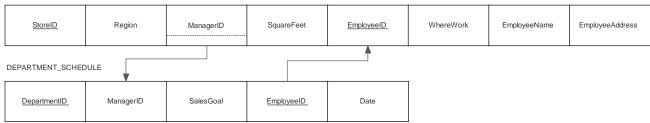
CASE 1: STORE\_EMPLOYEE and DEPARTMENT\_SCHEDULE

CASE 2: STORE\_DEPARTMENT and EMPLOYEE\_SCHEDULE

CASE 3: STORE\_SCHEDULE and EMPLOYEE\_DEPARTMENT

## CASE 1:

# STORE\_EMPLOYEE



Case 1 does not make sense for a large retail chain that this problems states this decomposition is to be applied to. The DEPARTMENT\_SCHEDULE does not indicate which store the DEPARTMENT\_SCHEDULE is intended for

# STORE\_DEPARTMENT



Case 2 makes sense for denormalization because STORE and DEPARTMENT are matched. This would satisfy Rule 2 on page 345 for a "many-to-many" relationship (associative entity) with non-key attributes

## CASE 3:

# STORE\_SCHEDULE

<u>StoreID</u>	Region	<u>ManagerID</u>	SquareFeet	<u>DepartmentID</u>	<u>EmployeeID</u>	Date
EMPLOYEE_DEPARTMENT						
<u>EmployeeID</u>	WhereWork	EmployeeName	<u>ManagerID</u>	EmployeeAddress	<u>DepartmentID</u>	Date