**Problem 1**

Dimensions

**Franchise**

FranchId: Franchise.FranchId

Franchise.FranchRegion

Franchise.FranchPostalCode

Franchise.FranchModelType

**Product**

ProductId: Merchandise.MerchId | ServiceCategory.ServCatId | Event type code from Worksheet

ProductName: Merchandise.Name | ServiceCategory.ServCatName | Event name from Worksheet

ProductType: derived column indicating type Service or Merchandise or Special Event

**Customer**

CustId: Member.MmbrId | Corporate customer Id from Worksheet

Customer Name: Member.MmbrName | Corporate Customer Name from Worksheet

CustZip: Member.Zip | Default value “0” for corporate type

Customer Location: Franchise.FranchRegion | default 0 for Corporate

Customer Type: derived column hierarchical Private -> Guest or Member | Corporate (not hierarchical)

Member TypeId: MemberType.MemtypeId | Default 0 for guests and corporate

Member Type Name: MemberType.MemberTypeName

**Calendar**

Date columns in the ERD (Sale, ServPutchase, Member, Event Date at worksheet) and spreadsheet (PurchDate); hierarchical (year -> month -> week->day)