Week 3:

Problem 1:

1. You should identify dimensions, map dimensions to data sources, and specify dimension hierarchies. For each dimension, you should identify its data sources and attributes in each data source. For hierarchical dimensions, you should indicate the levels from broad to narrow.

Ans

Merchandise, Franchise, Member, Services, calendar are dimensions. Merchandise, Franchise, Member, Services come from the ERD and the sample spreadsheet. The calendar dimension is a standard data warehouse dimension. Calendar is a hierarchical dimension. Phone and email can be parsed to be hierarchical as part of the supplier dimension

* Merchandise

MerchId : ERD only

MerchName : ERD only

MerchType : ERD only

* Franchise

FranchId : ERD only

FranchRegion : ERD only

FranchPostalCode : ERD only

FranchModelType : ERD only

* Member

MbrId : ( ERD + CorporateCustomerId from spreadsheet )

MbrName : ( ERD + CorporateCustomerName from spreadsheet )

MbrZip : ( ERD + Location from spreadsheet if Zip Code can be identified for location)

MbrEmail : ERD only ; hierarchical (top level domain → second level domain → local part)

MbrType : ERD only

* Services

ServiceId (ServCatId : ERD only)

ServiceType ( EventTypeCode : Spreadsheet )

ServiceName ( ServCatName : ERD ) | ( EventName : Spreadsheet )

* Calender

Date columns in the ERD (MbrDate, ServPurchDate, and SalesDate) and spreadsheet (EventDate); hierarchical (year → month → day)