**Problem1 : Module 3**

The dimensions in the problem are Franchise, ProductService,Member,Merchandise and Calendar are dimensions. Franchise,ProductService,Member,Merchandise come from the ERD and the special events spreadsheet. The calendar dimension is a standard data warehouse dimension.

Product is a combination of ServiceCategory,Special Event Worksheet.

Calendar is a hierarchical dimension.

FranchRegion can be made hierarchical in Franchise Dimension.

MmbrEmail can be parsed to be hierarchical as part of the Member dimension.

* Franchise
  + FranchId: ERD only
  + FranchRegion (Franchise table) ERD only,hierarchical(Country -> FranchRegion)
  + FranchPostalCode: ERD only;
  + FranchModelType: ERD only;
* ProductService (ServiceCategory + SpecialEventsWorksheet)
* ProdId : ERD.

(ServCatId (ServiceCategory Table).

Some special Id for Special events.

* ProdName: ERD and Special Events Worksheet .

(ServCatName) | (Event Name(Special Events Worksheet)

* ProdType : Special Events Worksheet

(Event Type Code(Special Events Worksheet)) and Service Type for Service Category.

* Member
* MmbrId: (ERD) | (Corporate CustomerId (Worksheet))
* MmbrName: (ERD) | (Corporate Customer Name (Worksheet).
* MmbrZip: (ERD) only.

Customer Location(worksheet), If Zip codes can be found out for region,we can enter zip codes for corporate customers.

* + MmbrEmail: (ERD) only ,Hierarchical (top level domain → second level domain → local part)
* MmbrType: (From MemberType Table)
* Calendar
  + Date columns in the ERD (MmbrDate, ServPuchDate, and SaleDate) and spreadsheet (EventDate). EventDate can be added as ServPurchDate as on that day event was purchased and amount was given.

hierarchical (year → month → day).

* Merchandise
* MerchId: ERD only.
* MerchName: ERD only.
* MerchType: ERD only.