Problem 3:

Grain for the problem is Franchise, Merchandise, Service, Special Event, CorporateCustomer, Calender,Member

(Although by this there will be greater empty cells)

Merchandise = 300

Service = 20

Member = 50,000

CorporateCustomer = 150

Time = 365

Franchise = 350

Total Revenue on Sale Rows, Service Purchase, SpreadSheet Rows

1,50,000\*450000 + 1,00,000 + 60,000 = 67500160000

Sparsity estimate:

* 1 - ( fact table size / product of dimensions )
* 1 – (67500160000/ (300\*325\*20\*50,000\*350\*150))
* The data cube has mostly missing cells with slightly equal to 0-1% with non zero values