

MISY 4390
Spring 2012
Dr. Kakoli Bandyopadhyay
Assignment 5
Total Points: 20
Due Date: February 28, 2012

We will use the Tableau software to work on this assignment. Tableau is used to perform visual analysis for databases. **We will connect to the database sample: Coffee Chain.** The database has the following tables:

Dimension Table:

1. Location

Microsoft Access - Table Tools

Home Create External Data Database Tools Acrobat Datasheet

Security Warning: Certain content in the database has been disabled. Options...

All Tables

- factTable
 - factTable : Table
- Location
 - Location : Table
 - CoffeeChain Query
- Product
 - Product : Table
 - CoffeeChain Query

Location

Area Code	State	Market	Market Size	Add New Field
203	Connecticut	East	Small Market	
206	Washington	West	Small Market	
209	California	West	Major Market	
210	Texas	South	Major Market	
212	New York	East	Major Market	
213	California	West	Major Market	
214	Texas	South	Major Market	
216	Ohio	Central	Major Market	
217	Illinois	Central	Major Market	
224	Illinois	Central	Major Market	
225	Louisiana	South	Small Market	
234	Ohio	Central	Major Market	
239	Florida	East	Major Market	
253	Washington	West	Small Market	
254	Texas	South	Major Market	
262	Wisconsin	Central	Small Market	
281	Texas	South	Major Market	
303	Colorado	Central	Major Market	
305	Florida	East	Major Market	
309	Illinois	Central	Major Market	
310	California	West	Major Market	

Record: 1 of 156 No Filter Search

Datasheet View

Start | orkut - home - ... | Microsoft Outl... | BI Spring 2009 | Datasources | Document1 - M... | Tableau - Book1 | Microsoft Acc... | 12:57 PM

2. Dimension Table: Product

The screenshot shows the Microsoft Access application window with the 'Table Tools' ribbon selected. The 'Product' table is open in Datasheet View. The left-hand 'All Tables' pane shows the database structure, including 'factTable', 'Location', 'Product', and 'CoffeeChain Query'. The 'Product' table is highlighted. The main area displays the following data:

Product Type	Product	ProductId	Type
Coffee	Amaretto	1	Regular
Coffee	Columbian	2	Regular
Coffee	Decaf Irish Cre.	3	Decaf
Espresso	Caffe Latte	4	Regular
Espresso	Caffe Mocha	5	Regular
Espresso	Decaf Espresso	6	Decaf
Espresso	Regular Espres	7	Regular
Herbal Tea	Chamomile	8	Decaf
Herbal Tea	Lemon	9	Decaf
Herbal Tea	Mint	10	Decaf
Tea	Darjeeling	11	Regular
Tea	Earl Grey	12	Regular
Tea	Green Tea	13	Regular

The status bar at the bottom indicates 'Record: 1 of 13' and 'No Filter'.

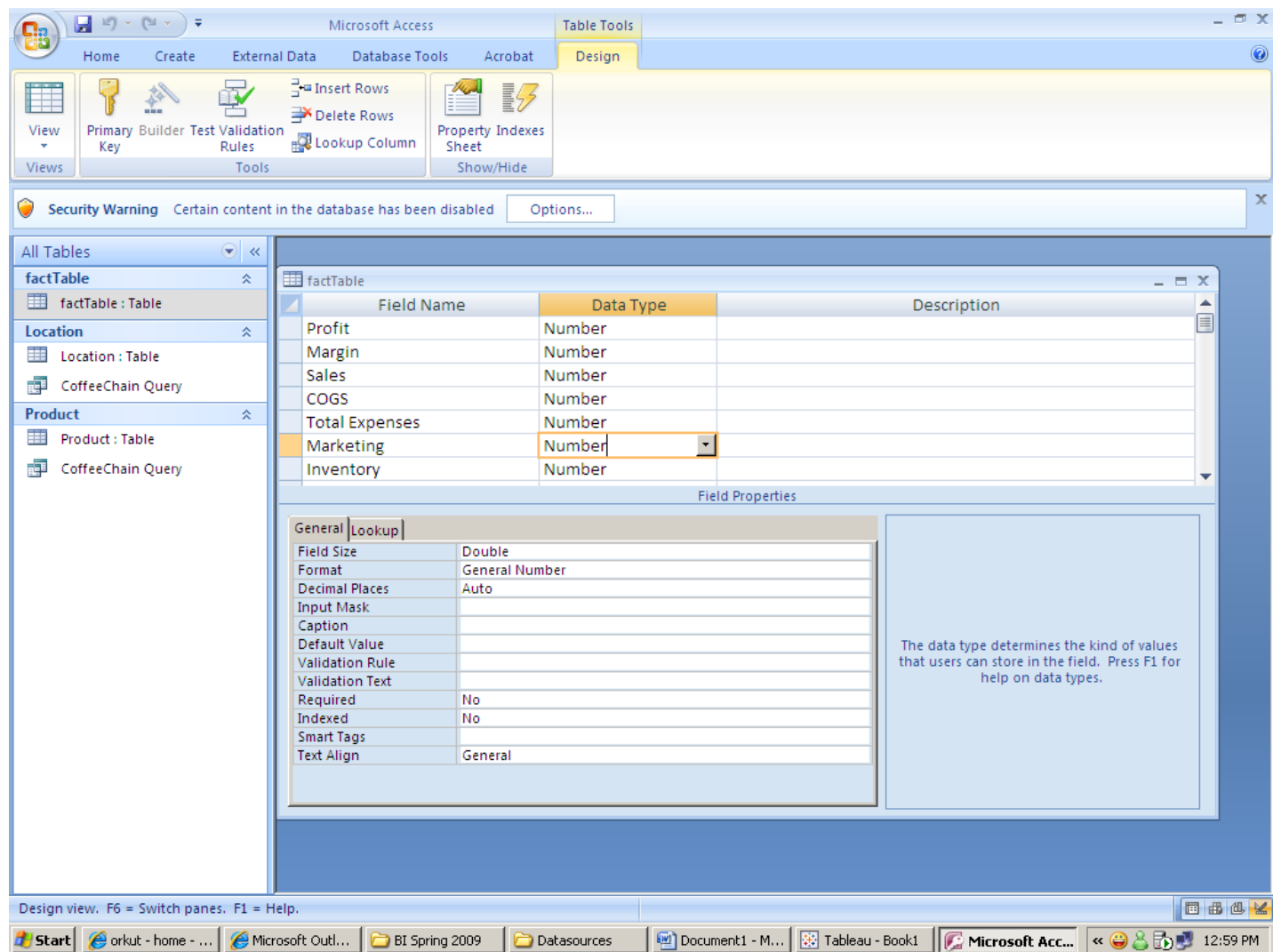
3. Fact Table

The screenshot shows the Microsoft Access application window with the 'factTable' open in Datasheet View. The left-hand 'All Tables' pane shows the database structure, including 'factTable', 'Location', 'Product', and 'CoffeeChain Query'. The 'factTable' is highlighted. The main area displays the following data:

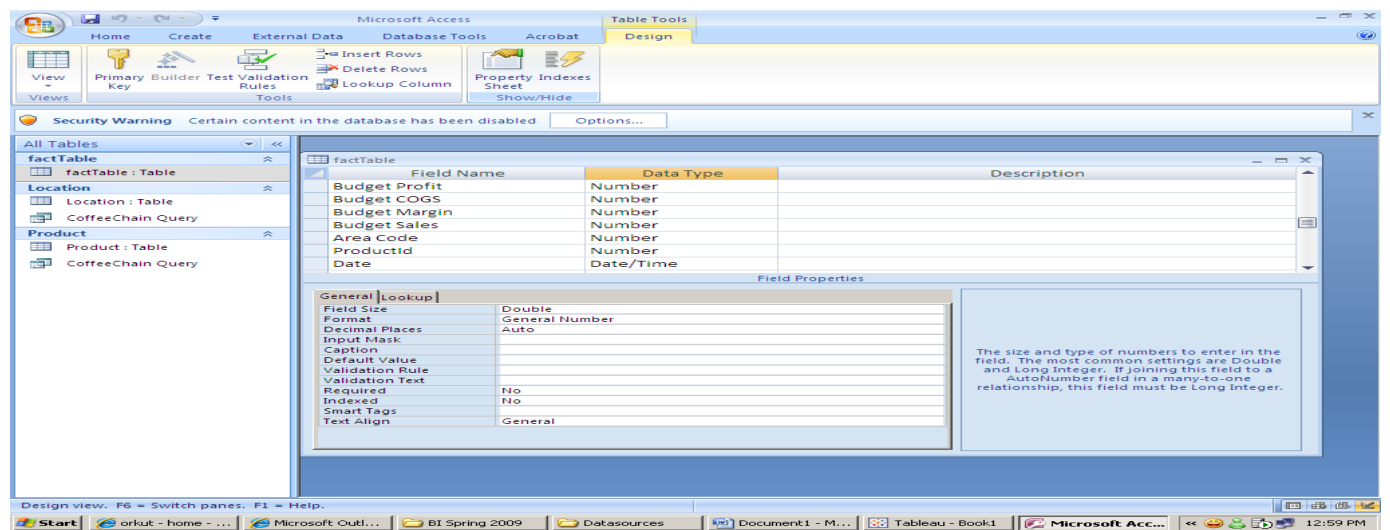
Profit	Margin	Sales	COGS	Total Expen	Marketing	Inventory
55	75	130	55	46	18	47
39	104	189	85	65	32	94
46	89	163	74	43	22	82
43	68	115	47	25	13	90
107	176	292	116	69	38	90
22	65	113	48	43	15	31
15	91	51	20	16	5	80
-2	75	128	53	77	48	55
32	93	169	76	61	28	58
32	52	87	35	20	9	85
16	57	100	43	41	14	38
75	135	225	90	60	29	114
28	49	83	34	21	9	85
16	56	98	42	40	13	38
41	64	108	44	23	12	88
1	84	144	60	83	54	60
33	54	90	36	21	10	80
2	86	147	61	84	55	61
122	195	325	130	73	42	113

The status bar at the bottom indicates 'Record: 1 of 4248' and 'No Filter'.

The fact table fields are:



And



Things to do:

Using Tableau answer the following questions:

1. Which product type (Coffee/ Espresso/ Herbal Tea/ Tea) yields the **maximum profit** in each market size(major/small)? (4 points)

Hint: drag and drop product type and market size from dimensions to columns and drag and drop profit from the fact table (measures) to rows. **Go to Lable > Show Mark Labels.**

Product Type	Market Size	Profit
	Major	
	Small	

2. Which product type (Coffee/ Espresso/ Herbal Tea/ Tea) yields **maximum sales** in each market (east/ west/south/central)? (4 points)

Hint: product type in columns and market and sales in rows. Find out the maximum sales in each region. To clear rows and columns, drag and drop the fields to their original place.

Product Type	Market	Sales
	East	
	West	
	South	
	Central	

3. Which product (Amaretto, Columbian, Cafe Latte, etc.) and product type (Coffee/ Espresso/ Herbal Tea/ Tea) give the **maximum profit** in which State (California, Florida, Texas, Connecticut, etc.)? (6 points)

Hint: product and product type in columns and state and profit in rows. Find out the maximum profit by clicking on the tallest bar graph.

Product	Product Type	State	Profit
Amaretto	Coffee		
Caffe Latte	Espresso		
Caffe Mocha	Espresso		
Chamomile	Herbal Tea		
Columbian	Coffee		
Darjeering	Tea		
Decaf Espresso	Espresso		
Decaf Irish Cream	Coffee		
Earl Grey	Tea		
Green Tea	Tea		

Lemon	Herbal Tea		
Mint	Herbal Tea		
Regular Espresso	Espresso		

4. Which product type (Coffee/ Espresso/ Herbal Tea/ Tea) in which market (east/ west/south/central) has the maximum inventory? (4 Points)

Hint: product type in columns and market and inventory in rows. Find out the maximum inventory.

Product Type	Market	Inventory
	East	
	West	
	South	
	Central	

5. Type Decaf has **maximum sales** in which State? (2 points)

Hint: Type and state in columns and sales in rows. Find out the maximum sales for decaf.

Type	State	Sales
Decaf		