Dominick's Data

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1.Shadata

```
library(sas7bdat)
library(knitr)
library(pander)
#library(sqldf)
library(dplyr)
X=read.sas7bdat("~/Downloads/shadata.sas7bdat",debug=TRUE)
#X
#write.csv(X, file = "shadata.csv") #Writing into an excel file for easy reading
pander(head(X,5))
```

Table 1: Table continues below

WEEK	Quarter	Year	UPC	perm1	size	unit	price	unit_price
128	1	1992	521328700	NA	6	OZ	1.69	0.2817
128	1	1992	1.151e + 09	NA	4	OZ	5.997	1.499
128	1	1992	1.151e + 09	NA	1	CT	5.79	5.79
128	1	1992	1.151e + 09	NA	1	CT	5.839	5.839
128	1	1992	1.151e + 09	NA	1	CT	5.796	5.796

Table 2: Table continues below

sales	quantity_sold	unit_sold	retail_margin	unit_retail_margin
1.69	1	6	0.289	0.04816
173.9	29	116	2.214	0.5534
86.85	15	15	2.332	2.332
262.7	45	45	2.28	2.28
289.8	50	50	2.303	2.303

BonusBuy	${\bf Simple Price Reduction}$	Coupon
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

```
#kable(str(X))
#sha1992<- read.csv.sql("shadata.csv",sql = "select * from file where Year = '1992'")
sha1992=filter(X,Year=='1992')
TotalSales1992=sum(sha1992$sales)</pre>
```

```
kable(paste("Total Sales in 1992 $", TotalSales1992))

Total Sales in 1992 $ 5347987.915
```

```
TotalQuantitySold1992=sum(sha1992$quantity_sold)
kable(paste("Total Quantity sold in 1992 is ",TotalQuantitySold1992))
```

Total Quantity sold in 1992 is 2165933

First Quarter of 1992

```
sha1992_Quarter1=filter(X,Year=='1992',Quarter=='1')
TotalSales1992_Quarter1=sum(sha1992_Quarter1$sales)
kable(paste("Total Sales in 1992 and quarter1 $",TotalSales1992_Quarter1))
```

Total Sales in 1992 and quarter 1 $\ 723135.4$

```
TotalQuantitySold1992_Quarter1=sum(sha1992_Quarter1$quantity_sold)
kable(paste("Total Quantity sold in 1992 and quater 1 is ",TotalQuantitySold1992_Quarter1))
```

Total Quantity sold in 1992 and quater 1 is 300425

Second Quarter of 1992

```
sha1992_Quarter2=filter(X,Year=='1992',Quarter=='2')
TotalSales1992_Quarter2=sum(sha1992_Quarter2$sales)
kable(paste("Total Sales in 1992 and quarter 2 $",TotalSales1992_Quarter2))
```

Total Sales in 1992 and quarter 2 \$ 1497306.65

```
TotalQuantitySold1992_Quarter2=sum(sha1992_Quarter1$quantity_sold)
kable(paste("Total Quantity sold in 1992 and quater 2 is ",TotalQuantitySold1992_Quarter2))
```

Total Quantity sold in 1992 and quater 2 is 300425

Third Quarter of 1992

```
sha1992_Quarter3=filter(X,Year=='1992',Quarter=='3')
TotalSales1992_Quarter3=sum(sha1992_Quarter3$sales)
kable(paste("Total Sales in 1992 and quarter 3 $",TotalSales1992_Quarter3))
```

Total Sales in 1992 and quarter 3 \$1526106.95

```
TotalQuantitySold1992_Quarter3=sum(sha1992_Quarter3$quantity_sold)
kable(paste("Total Quantity sold in 1992 and quater 3 is ",TotalQuantitySold1992_Quarter3))
```

Total Quantity sold in 1992 and quater 3 is 611867

Fourth Quarter of 1992

```
sha1992_Quarter4=filter(X,Year=='1992',Quarter=='4')
TotalSales1992_Quarter4=sum(sha1992_Quarter4$sales)
kable(paste("Total Sales in 1992 and quarter 4 $",TotalSales1992_Quarter4))
```

Total Sales in 1992 and quarter 4 \$ 1601438.915

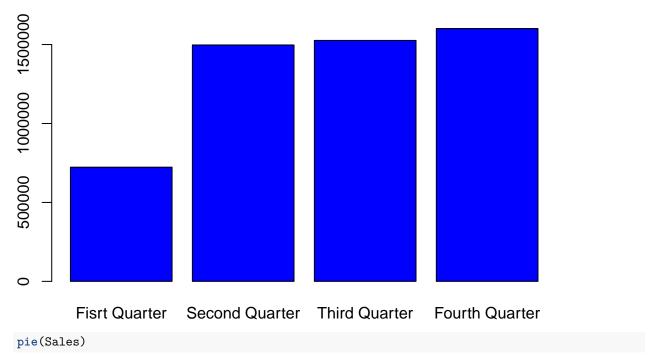
```
TotalQuantitySold1992_Quarter4=sum(sha1992_Quarter4$quantity_sold)
kable(paste("Total Quantity sold in 1992 and quater 4 is ",TotalQuantitySold1992_Quarter4))
```

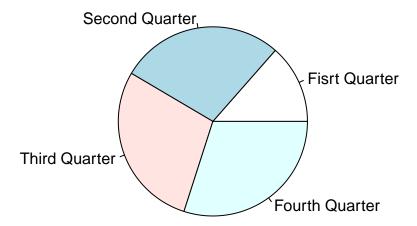
Total Quantity sold in 1992 and quater 4 is 636884

Visualization of sales

Sales=c(TotalSales1992_Quarter1,TotalSales1992_Quarter2,TotalSales1992_Quarter3,TotalSales1992_Quarter4
names(Sales)=c("Fisrt Quarter","Second Quarter","Third Quarter","Fourth Quarter")
barplot(Sales,col="blue",main="Sales by quarter for 1992")

Sales by quarter for 1992

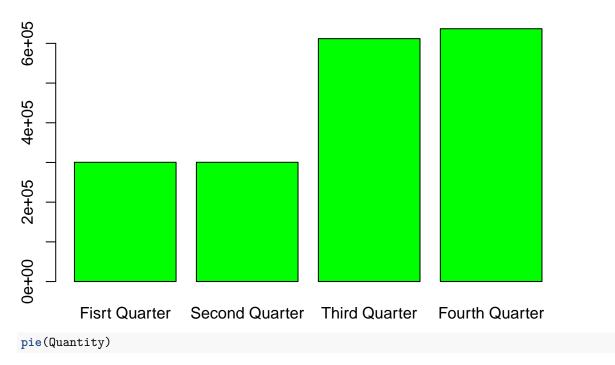


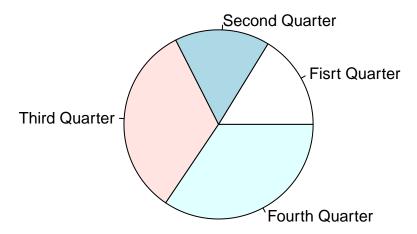


Visualization of Quantity Sold

Quantity=c(TotalQuantitySold1992_Quarter1,TotalQuantitySold1992_Quarter2,TotalQuantitySold1992_Quarter3
names(Quantity)=c("First Quarter","Second Quarter","Third Quarter","Fourth Quarter")
barplot(Quantity,col="green",main="Quantity sold by quarter in 1992")

Quantity sold by quarter in 1992





2. Inddata

```
X=read.sas7bdat("~/Downloads/Inddata.sas7bdat",debug=TRUE)
#X
#write.csv(X, file = "Inddata.csv") #Writing into an excel file for easy reading
pander(head(X,5))
```

Table 14: Table continues below

WEEK	Quarter	Year	UPC	perm1	size	unit	price	unit_price
1	3	1989	1.111e+09	28302	157	OZ	5.686	0.03622
1	3	1989	1.111e + 09	28302	320	OZ	11.75	0.03672
1	3	1989	1.111e+09	28302	320	OZ	14.29	0.04466
1	3	1989	1.111e+09	28302	157	OZ	7.142	0.04549
1	3	1989	1.111e + 09	28302	84	OZ	4.164	0.04958

Table 15: Table continues below

sales	$quantity_sold$	$unit_sold$	retail_margin	unit_retail_margin
2178	383	60131	1.071	0.006822
1692	144	46080	2.098	0.006555
2544	178	56960	1.154	0.003606
242.8	34	5338	0.4422	0.002816
2332	560	47040	0.3104	0.003695

BonusBuy	SimplePriceReduction	Coupon
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

3. fsfdata

```
X=read.sas7bdat("~/Downloads/fsfdata.sas7bdat",debug=TRUE)
#X
#write.csv(X, file = "fsfdata.csv") #Writing into an excel file for easy reading
pander(head(X,5))
```

Table 17: Table continues below

WEEK	Quarter	Year	UPC	perm1	size	unit	price	unit_price
1	3	1989	1.111e+09	28302	96	ΟZ	4.209	0.04384
1	3	1989	1.111e + 09	28302	64	OZ	2.74	0.04281
1	3	1989	1.111e + 09	28302	33	OZ	1.577	0.04778
1	3	1989	1.111e + 09	28302	64	OZ	2.29	0.03578
1	3	1989	1.111e + 09	28302	96	OZ	3.596	0.03746

Table 18: Table continues below

sales	quantity_sold	unit_sold	retail_margin	unit_retail_margin
67.34	16	1536	0.5768	0.006009
43.84	16	1024	0.2899	0.00453
848.3	538	17754	0.3028	0.009174
3398	1484	94976	0.474	0.007407
945.9	263	25248	0.8705	0.009068

BonusBuy	SimplePriceReduction	Coupon
0	0	0
1	0	0
0	0	0
1	0	0
0	0	0

#kable(str(X)) Just to see the type of columns

4. frjdata

```
X=read.sas7bdat("~/Downloads/frjdata.sas7bdat",debug=TRUE)
#X
#write.csv(X, file = "frjdata.csv") #Writing into an excel file for easy reading
pander(head(X,5))
```

Table 20: Table continues below

WEEK	Quarter	Year	UPC	perm1	size	unit	price	unit_price
1	3	1989	1.11e + 09	NA	12	OZ	1.633	0.1361
1	3	1989	2.4e + 09	76597	12	OZ	0.99	0.0825
1	3	1989	2.5e + 09	11308	6	OZ	0.9269	0.1545
1	3	1989	2.5e + 09	11308	6	OZ	0.79	0.1317
1	3	1989	2.5e + 09	11308	12	OZ	1.198	0.09985

Table 21: Table continues below

sales	$quantity_sold$	$unit_sold$	retail_margin	unit_retail_margin
2459	1506	18072	0.6156	0.0513
574.2	580	6960	0.316	0.02633
3033	3272	19632	0.294	0.04899
136.7	173	1038	0.249	0.0415
3428	2861	34332	0.4372	0.03644

BonusBuy	${\bf Simple Price Reduction}$	Coupon
0	0	0
0	0	0
0	0	0
0	0	0
1	0	0

#kable(str(X))

5. bjcdata

X=read.sas7bdat("~/Downloads/bjcdata.sas7bdat",debug=TRUE)
#X
#write.csv(X, file = "bjcdata.csv") #Writing into an excel file for easy reading
pander(head(X,5))

Table 23: Table continues below

WEEK	Quarter	Year	UPC	perm1	size	unit	price	unit_price
1	3	1989	1.119e + 09	NA	32	ΟZ	1.35	0.04219
1	3	1989	1.48e + 09	20539	32	OZ	1.337	0.04179
1	3	1989	1.48e + 09	20539	64	OZ	2.33	0.0364
1	3	1989	1.48e + 09	20539	64	OZ	2.344	0.03663
1	3	1989	1.48e + 09	20539	32	OZ	1.744	0.05449

Table 24: Table continues below

sales	quantity_sold	unit_sold	retail_margin	unit_retail_margin
56.7	42	1344	0.459	0.01434
905.4	677	21664	0.3943	0.01232
92559	39729	2542656	1.132	0.01769
39504	16851	1078464	1.15	0.01797
1093	627	20064	0.5966	0.01865

BonusBuy	${\bf Simple Price Reduction}$	Coupon
0	0	0
0	0	0
0	0	1
0	0	1
0	0	0

#kable(str(X))

6. berdata

X=read.sas7bdat("~/Downloads/berdata.sas7bdat",debug=TRUE)
#X
#write.csv(X, file = "berdata.csv") #Writing into an excel file for easy reading
pander(head(X,5))

Table 26: Table continues below

WEEK	Quarter	Year	UPC	perm1	size	unit	price	unit_price
91	2	1991	1.82e + 09	59184	32	ΟZ	1.59	0.04969
91	2	1991	1.82e + 09	59184	72	OZ	3.49	0.04847
91	2	1991	1.82e + 09	59184	96	OZ	4.59	0.04781
91	2	1991	1.82e + 09	59184	72	OZ	3.99	0.05542
91	2	1991	1.82e + 09	59184	72	OZ	2.89	0.04014

Table 27: Table continues below

sales	${\bf quantity_sold}$	$unit_sold$	${\rm retail_margin}$	unit_retail_margin
367.3	231	7392	0.4469	0.01397
4094	1173	84456	0.6648	0.009234
101	22	2112	1.128	0.01175
27.93	7	504	0.8902	0.01236
598.2	207	14904	0.6531	0.009071

BonusBuy	SimplePriceReduction	Coupon
0	0	0

BonusBuy	SimplePriceReduction	Coupon
0	0	0
0	0	0
0	0	0
0	0	0

#kable(str(X))