



CS 1103 - FR02B

Lab 5

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Cleanup Exercise:

1. Customer Anne Farriss has called, asking for a listing of her invoice numbers and dates.

Source code:

```
use Ch07_SaleCo;

select INV_NUMBER, INV_DATE from CUSTOMER natural join INVOICE
where CUS_LNAME = "Farriss";
```

Output:

#	INV_NUMBER	INV_DATE
1	1005	2018-01-17 00:00:00

Figure 1: Output result of Query 1

2. Corporate Management would like a list of all products sold by companies located in Florida.

Source code:

```
select P_CODE, P_DESCRIPT from VENDOR natural join PRODUCT where
V_STATE = "FL";
```

#	P_CODE	P_DESCRIPT
1	11QER/31	Power painter, 15 psi., 3-nozzle
2	2238/QPD	B&D cordless drill, 1/2-in.
3	WR3/TT3	Steel matting, 4'x8'x1/6", .5" ...

Figure 2: Output result of Query 2

3. Customer Anne Farriss called back and would like a complete account. This listing will need her name, phone number and balance, and invoice information

Source code:

```
select*from CUSTOMER natural join INVOICE where CUS_LNAME =
"Farriss";
```

Output:

#	CUS_CODE	CUS_LNAME	CUS_FNAME	CUS_INITIAL	CUS_AREACODE	CUS_PHONE	CUS_BALANCE	INV_NUMBER	INV_DATE
1	10018	Farriss	Anne	G	713	382-7185	216.55	1005	2018-01-17 00:00:00

Figure 3: Output result of Query 3

Exercises:

1. List all columns for the LGBrand table, ordered by BRAND_TYPE

Source code:

```
use Ch07_LargeCo;  
select * from LGBRAND order by BRAND_TYPE;
```

Output:

#	BRAND_ID	BRAND_NAME	BRAND_TYPE
1	25	STUTTENFURST	CONTRACTOR
2	27	HOME COMFORT	CONTRACTOR
3	28	OLDE TYME QUALITY	CONTRACTOR
4	30	LONG HAUL	CONTRACTOR
5	35	LE MODE	PREMIUM
6	26	HOMESTEADER FINEST	PREMIUM
7	33	BINDER PRIME	PREMIUM
8	34	PRIME OF LIFE	VALUE
9	32	YOUR HOME HELPER	VALUE
10	31	VALU-MATTE	VALUE
11	29	BUSTERS	VALUE
12	24	REGAL HOME	VALUE
13	23	FORESTERS BEST	VALUE
*	NULL	NULL	NULL

Figure 4: Output result of Query 1

2. For this same table, report the number of brands manufactured for each BRAND_TYPE. The columns should be renamed to more reasonable names.

Source code:

```
select count(BRAND_NAME) as NUMBER_OF_BRAND, BRAND_TYPE from  
LGBRAND group by BRAND_TYPE;
```

Output:

#	NUMBER_OF_BRAND	BRAND_TYPE
1	4	CONTRACTOR
2	3	PREMIUM
3	6	VALUE

Figure 5: Output result of Query 2

3. List for each state the number of customers who have non-zero balances.

Source code:

```
select CUST_STATE, count(CUST_CODE) as NUMBER_OF_CUSTOMER from  
LGCUSTOMER where CUST_BALANCE>0 group by CUST_STATE;
```

Output:

#	CUST_STATE	NUMBER_OF_CUSTOMER
1	AL	39
2	CT	12
3	DE	2
4	FL	57
5	GA	32
6	IN	52
7	KY	42
8	MA	34
9	MD	51
10	ME	14
11	MI	30
12	MS	24
13	NC	59
14	NH	8
15	NJ	34
16	NY	104
17	OH	60
18	PA	118
19	RI	8
20	SC	23
21	TN	32
22	VA	38
23	VT	27
24	WV	27

Figure 6: Output result of Query 3

4. For 3, show only states with more than 100 customers.

Source code:

```
select CUST_STATE, count(CUST_CODE) as NUMBER_OF_CUSTOMER from  
LGCUSTOMER where CUST_BALANCE>0 group by CUST_STATE having  
count(CUST_CODE)>100;
```

Output:

#	CUST_STATE	NUMBER_OF_CUSTOMER
1	NY	104
2	PA	118

Figure 7: Output result of Query 4

5. For 4, order the output by State in reverse alphabetic order.

Source code:

```
select CUST_STATE, count(CUST_CODE) as NUMBER_OF_CUSTOMER from  
LGCUSTOMER where CUST_BALANCE>0 group by CUST_STATE having  
count(CUST_CODE)>100 order by CUST_STATE desc;
```

Output:

#	CUST_STATE	NUMBER_OF_CUSTOMER
1	PA	118
2	NY	104

Figure 8: Output result of Query 5

6. For 3, show only states with more than 100 customers, ordered by number of customers (fewest first).

Source code:

```
select CUST_STATE, count(CUST_CODE) as NUMBER_OF_CUSTOMER from  
LGCUSTOMER where CUST_BALANCE>0 group by CUST_STATE having  
count(CUST_CODE)>100 order by NUMBER_OF_CUSTOMER asc;
```

Output:

#	CUST_STATE	NUMBER_OF_CUSTOMER
1	NY	104
2	PA	118

Figure 9: Output result of Query 6

7. List the number of products purchased for each Brand Type, in the State of Maine ('ME')

Source code:

```
select LB.BRAND_TYPE, sum(LP.PROD_QOH) from LGBRAND as LB,  
LGPRODUCT as LP, LGCUSTOMER as LC where LB.BRAND_ID =  
LP.Brand_ID and LC.CUST_STATE = "ME" group by LB.BRAND_TYPE;
```

Output:

#	BRAND_TYPE	sum(LP.PROD_QOH)
1	CONTRACT...	212014
2	PREMIUM	100958
3	VALUE	91190

Figure 10: Output result of Query 7

**9. Who is the newest employee and how long have they been with the company?
List only the one employee.**

Source code:

```
select max(EMP_HIREDATE), EMP_FNAME, EMP_LNAME from LGEMPLOYEE;
```

Output:

#	MAX(EMP_HIREDATE)	EMP_FNAME	EMP_LNAME
1	2017-12-15	TAMARA	MCDONALD

Figure 11: Output result of Query 9