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USE wagstaff_INFOST_410;
No Output

```
/** List the complete Part table. **/  
SELECT * FROM Part;
```

PartNum	Description	OnHand	Class	Warehouse	Price
AT94	Iron	50	HW	3	24.95
BV06	Home Gym	45	SG	2	794.95
CD52	Microwave Oven	32	AP	1	165
DL71	Cordless Drill	21	HW	3	129.95
DR93	Gas Range	8	AP	2	495
DW11	Washer	12	AP	3	399.99
FD21	Stand Mixer	22	HW	3	159.95
KL62	Dryer	12	AP	1	349.95
KT03	Dishwasher	8	AP	3	595
KV29	Treadmill	9	SG	2	1390

```
/** List the number and name of every customer represented by sales rep 35. **/  
SELECT CustomerName, CustomerNum FROM Customer WHERE RepNum = 35;
```

CustomerName	CustomerNum
Brookings Direct	282
The Everything Shop	408
Lee's Sport and Appliance	687
Deerfield's Four Seasons	725

```
/** List the number and name of all customers that are represented by sales rep  
35 and that have credit limits of $10,000. **/  
SELECT CustomerName, CustomerNum FROM Customer WHERE RepNum = 35 && CreditLi  
mit = 10000;
```

CustomerName	CustomerNum
Brookings Direct	282

```
/** List the number and name of all customers that are represented by sales rep  
35 or that have credit limits of $10,000. **/  
SELECT CustomerName, CustomerNum FROM Customer WHERE RepNum = 35 || CreditLi  
mit = 10000;
```

CustomerName	CustomerNum
Brookings Direct	282
The Everything Shop	408
Bargains Galore	462
Johnson's Department Store	608
Lee's Sport and Appliance	687
Deerfield's Four Seasons	725

```

/** For each order, list the order number, order date, number of the customer
that placed the order, and name of the customer that placed the order. (HINT: to
retrieve this information you will need to use JOIN. You can complete JOIN by
either including clause: WHERE Orders.CustomerNum=Customer.CustomerNum or by a
pplying JOIN operation: FROM Orders JOIN Customer ON Orders.CustomerNum=Customer
.CustomerNum) */

```

```

SELECT OrderNum, OrderDate, Customer.CustomerNum, Customer.CustomerName FROM
Orders JOIN Customer ON Orders.CustomerNum = Customer.CustomerNum;

```

OrderNum	OrderDate	CustomerNum	CustomerName
21608	2013-10-20	148	Al's Appliance and Sport
21610	2013-10-20	356	Ferguson's
21613	2013-10-21	408	The Everything Shop
21614	2013-10-21	282	Brookings Direct
21617	2013-10-23	608	Johnson's Department Store
21619	2013-10-23	148	Al's Appliance and Sport
21623	2013-10-23	608	Johnson's Department Store

```

/** List the number and name of all customers represented by Juan Perez. (JOIN
Customer and Rep) */

```

```

SELECT CustomerName, CustomerNum FROM Customer JOIN Rep ON Customer.RepNum
= Rep.RepNum WHERE Rep.FirstName = 'Juan';

```

CustomerName	CustomerNum
Ferguson's	356
Bargains Galore	462
Johnson's Department Store	608

```

/** Or this can be accomplished with the following subquery, but there is a los
s in performance. SELECT CustomerName, CustomerNum FROM Customer WHERE RepNum
= (SELECT RepNum FROM Rep WHERE FirstName = 'Juan' && LastName = 'Perez'); */

```

No Output

```

/** How many orders were placed on 10/20/2013? (Hint: use COUNT(*) FROM Orders
WHERE OrderDate='2013-10-20') */

```

```

SELECT COUNT(*) FROM Orders WHERE OrderDate='2013-10-20';

```

COUNT(*)
2

```

/** Find the total of the balances for all customers represented by sales rep 3
5. (SUM(Balance)) */

```

```

SELECT SUM(Balance) FROM Customer WHERE RepNum = 35;

```

SUM(Balance)
8815.75

```

/** Give the part number, description, and on-hand value (OnHand *Price) for
each part in item class HW. */

```

```

SELECT PartNum, Description, (OnHand * Price) AS 'on-hand value' FROM Part W

```

```
HERE Class = 'HW';
```

PartNum	Description	on-hand value
AT94	Iron	1247.5
DL71	Cordless Drill	2728.95
FD21	Stand Mixer	3518.9

```
/** List all columns and all rows in the Part table. Sort the results by part d  
escription. **/
```

```
SELECT * FROM Part ORDER BY Description;
```

PartNum	Description	OnHand	Class	Warehouse	Price
DL71	Cordless Drill	21	HW	3	129.95
KT03	Dishwasher	8	AP	3	595
KL62	Dryer	12	AP	1	349.95
DR93	Gas Range	8	AP	2	495
BV06	Home Gym	45	SG	2	794.95
AT94	Iron	50	HW	3	24.95
CD52	Microwave Oven	32	AP	1	165
FD21	Stand Mixer	22	HW	3	159.95
KV29	Treadmill	9	SG	2	1390
DW11	Washer	12	AP	3	399.99

```
/** List all columns and all rows in the Part table. Sort the results by part n  
umber within item class. **/
```

```
SELECT * FROM Part ORDER BY Class, PartNum;
```

PartNum	Description	OnHand	Class	Warehouse	Price
CD52	Microwave Oven	32	AP	1	165
DR93	Gas Range	8	AP	2	495
DW11	Washer	12	AP	3	399.99
KL62	Dryer	12	AP	1	349.95
KT03	Dishwasher	8	AP	3	595
AT94	Iron	50	HW	3	24.95
DL71	Cordless Drill	21	HW	3	129.95
FD21	Stand Mixer	22	HW	3	159.95
BV06	Home Gym	45	SG	2	794.95
KV29	Treadmill	9	SG	2	1390

```
/** List the item class and the sum of the number of units on hand. Group the r  
esults by item class. **/
```

```
SELECT Class, SUM(OnHand) FROM Part GROUP BY Class;
```

Class	SUM(OnHand)
HW	93
SG	54
AP	72

```
/** Create a new table named SportingGoods to contain the columns PartNum, Desc  
ription, OnHand, Warehouse, and Price for all rows in which the item class is SG  
. (CREATE TABLE .. AS SELECT .. FROM.. WHERE.. ) **/
```

```
CREATE TABLE SportingGoods AS SELECT PartNum, Description, OnHand, Warehouse
```

```
, price FROM Part WHERE Class = 'SG';
No Output
```

```
/** In the SportingGoods table, change the description of part BV06 to "Fitness
Gym." (UPDATE .. SET.. WHERE.. clause) **/
UPDATE SportingGoods SET Description = 'Fitness Gym' WHERE PartNum = 'BV06';
No Output
```

```
/** In the SportingGoods table, delete every row in which the price is greater
than $1,000. (DELETE .. FROM .. WHERE ) **/
DELETE FROM SportingGoods WHERE Price > 1000;
No Output
```

```
/** List the order number for each order that contains an order line for a part
located in warehouse 3. **/
SELECT OrderNum FROM OrderLine JOIN Part ON OrderLine.PartNum = Part.PartNum
WHERE Part.Warehouse = 3;
```

```
+-----+
| OrderNum |
+-----+
| 21608 |
| 21610 |
| 21614 |
+-----+
```

```
/** For each sales rep, list the rep number, the number of customers assigned to
the rep, and the average balance of the rep's customers. Group the records by
rep number and order the records ?? rep number. **/
```

```
SELECT RepNum, COUNT(CustomerNum) AS 'Customer Count', AVG(Balance) AS 'Average
Balance' FROM Customer GROUP BY RepNum ORDER BY RepNum;
```

```
+-----+-----+-----+
| RepNum | Customer Count | Average Balance |
+-----+-----+-----+
| 20 | 3 | 9177.67 |
| 35 | 4 | 2203.94 |
| 65 | 3 | 3767.67 |
+-----+-----+-----+
```

```
/** For each sales rep with fewer than four customers, list the rep number, the
number of customers assigned to the rep, and the average balance of the rep's
customers. Rename the count of the number of customers and the average of the b
alances to NumCustomers and AverageBalance, respectively. Order the groups by Re
pNumber **/
```

```
SELECT RepNum, COUNT(CustomerNum) AS 'NumCustomers', AVG(Balance) AS 'AverageB
alance' FROM Customer GROUP BY RepNum HAVING COUNT(CustomerNum) < 4 ORDER BY
RepNum;
```

```
+-----+-----+-----+
| RepNum | NumCustomers | AverageBalance |
+-----+-----+-----+
| 20 | 3 | 9177.67 |
| 65 | 3 | 3767.67 |
+-----+-----+-----+
```

```
/** List number, name, and balance for each customer whose balance is between $
1000 and $5000 **/
```

```
SELECT CustomerNum, CustomerName, Balance FROM Customer WHERE Balance > 1000
&& Balance < 5000;
```

```
+-----+-----+-----+
| CustomerNum | CustomerName | Balance |
+-----+-----+-----+
```

462	Bargains Galore	3412
608	Johnson's Department Store	2106
687	Lee's Sport and Appliance	2851

/** List the number, name, and available credit for all customers. Computed field: AvailableCredit: CreditLimit-Balance **/

```
SELECT CustomerNum, CustomerName, (CreditLimit - Balance) AS 'AvailableCredit'
FROM Customer;
```

CustomerNum	CustomerName	AvailableCredit
148	Al's Appliance and Sport	950
282	Brookings Direct	9568.5
356	Ferguson's	1715
408	The Everything Shop	-285.25
462	Bargains Galore	6588
524	Kline's	2238
608	Johnson's Department Store	7894
687	Lee's Sport and Appliance	2149
725	Deerfield's Four Seasons	7252
842	All Season	-721

/** List the number, name, and available credit for all customers with credit limits that exceed their balances. **/

```
SELECT CustomerNum, CustomerName, (CreditLimit - Balance) AS 'AvailableCredit'
FROM Customer WHERE CreditLimit > Balance;
```

CustomerNum	CustomerName	AvailableCredit
148	Al's Appliance and Sport	950
282	Brookings Direct	9568.5
356	Ferguson's	1715
462	Bargains Galore	6588
524	Kline's	2238
608	Johnson's Department Store	7894
687	Lee's Sport and Appliance	2149
725	Deerfield's Four Seasons	7252

/** List the number, name, and complete address of every customer located on a street that contains the letters Oxford. **/

```
SELECT CustomerNum, CustomerName, CONCAT(Street, ' ', City, ' ', State, ' ', Zip) AS 'Address'
FROM Customer WHERE Street LIKE '%oxford%';
```

CustomerNum	CustomerName	Address
608	Johnson's Department Store	372 Oxford Sheldon FL 33553

/** List the number, name, street, and credit limit for every customer with a credit limit of \$ 7500, \$10000, or \$15,000. **/

```
SELECT CustomerNum, CustomerName, Street, CreditLimit
FROM Customer WHERE CreditLimit IN (7500, 10000, 15000);
```

CustomerNum	CustomerName	Street	CreditLimit
148	Al's Appliance and Sport	2837 Greenway	7500
282	Brookings Direct	3827 Devon	10000

356	Ferguson's	382 Wildwood	7500
462	Bargains Galore	3829 Central	10000
524	Kline's	838 Ridgeland	15000
608	Johnson's Department Store	372 Oxford	10000
725	Deerfield's Four Seasons	282 Columbia	7500
842	All Season	28 Lakeview	7500

/** List the number, name, street, and credit limit of all customers. Order (sort) the customers by name. */

```
SELECT CustomerNum, CustomerName, Street, CreditLimit FROM Customer ORDER BY CustomerName;
```

CustomerNum	CustomerName	Street	CreditLimit
148	Al's Appliance and Sport	2837 Greenway	7500
842	All Season	28 Lakeview	7500
462	Bargains Galore	3829 Central	10000
282	Brookings Direct	3827 Devon	10000
725	Deerfield's Four Seasons	282 Columbia	7500
356	Ferguson's	382 Wildwood	7500
608	Johnson's Department Store	372 Oxford	10000
524	Kline's	838 Ridgeland	15000
687	Lee's Sport and Appliance	282 Evergreen	5000
408	The Everything Shop	1828 Raven	5000

/** List the number, name, street, and credit limit of all customers. Order the customers by name within descending credit limit. (In other words, sort the customers by credit limit in descending order. Within each group of customers that have a common credit limit, sort the customers by name.) */

```
SELECT CustomerNum, CustomerName, Street, CreditLimit FROM Customer ORDER BY CreditLimit DESC, CustomerName;
```

CustomerNum	CustomerName	Street	CreditLimit
524	Kline's	838 Ridgeland	15000
462	Bargains Galore	3829 Central	10000
282	Brookings Direct	3827 Devon	10000
608	Johnson's Department Store	372 Oxford	10000
148	Al's Appliance and Sport	2837 Greenway	7500
842	All Season	28 Lakeview	7500
725	Deerfield's Four Seasons	282 Columbia	7500
356	Ferguson's	382 Wildwood	7500
687	Lee's Sport and Appliance	282 Evergreen	5000
408	The Everything Shop	1828 Raven	5000

/** How many parts are in the item class HW */

```
SELECT COUNT(PartNum) AS 'Parts of class HW' FROM Part WHERE Class = 'HW';
```

Parts of class HW
3

/** Find the number of customers and the total of their balances. */

```
SELECT COUNT(CustomerNum) AS 'Total Customers', SUM(Balance) AS 'Total Balances' FROM Customer;
```

Total Customers	Total Balances
10	47651.8

/** Find the total number of customers and the total of their balances. Change the column names for the number of customers and the total of their balances to CustomerCount and BalanceTotal, respectively. */

```
SELECT COUNT(CustomerNum) AS 'CustomerCount', SUM(Balance) AS 'BalanceTotal'
FROM Customer;
```

CustomerCount	BalanceTotal
10	47651.8