

# CSE 305 Group Assignment 2

Team Avatar'); DROP TABLE students;--

Website Name : [www.ebae.com](http://www.ebae.com)

## Members

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## Data Dumps

### Items table

ID	Name	Type	ManufactureYear	CopiesSold	Stock
1	Titanic	DVD	2005	1	2
2	Nissan Sentra	Car	2007	1	3
3	Gamecube	Game	2001	0	3
4	Scott Pilgrim	DVD	2010	0	2
5	Inception	DVD	2010	0	10
6	GTA V	Game	2014	0	10

### Customers table

ID	LastName	FirstName	Address	City	State	ZipCode	Telephone	Email	CreditCardNumber	ItemsSold	ItemsPurchased	Rating
1	Smith	John	789 Peace Blvd	Los Angeles	CA	12345	(412) 443-4321	shlugic.sunysb.edu	2345-6789-2345-6789	3	0	3
2	Finch	Atticus	Happy 987	Stony Brook	NY	11790	516 111 11111	finch@gmail.com	1111-1111-1111-1111	0	1	3
3	Lu	Shiyong	123 Success Street	Stony Brook	NY	11790	(516) 632-8959	shiyong@cs.sunysb.edu	1234-5678-1234-5678	0	1	3
4	Du	Haixia	456 Fortune Road	Stony Brook	NY	11790	(516) 632-4360	dhaixia@cs.sunysb.edu	5678-1234-5678-1234	0	1	3

### Employees table

SSN	LastName	FirstName	Address	City	State	ZipCode	Telephone	StartDate	HourlyRate	Type	ID
123-45-6789	Smith	David	123 College Road	Stony Brook	NY	11790	(516) 215-2345	1998-11-01	60.00	Manager	1
789-12-3456	Warren	David	456 Sunken Street	Stony Brook	NY	11794	(516) 632-9987	1994-02-02	50.00	Employee	2
781-14-3126	Karl	Kyle	123 Broad Street	Bell	NY	11241	(516) 212-1234	2003-10-07	50.00	Employee	3

## Auctions table

ID	ItemID	SellerID	OpeningTime	ClosingTime	OpeningBid	CurrentBid	Reserve	Increment	EmployeeID
1	2	1	1998-11-01 00:00:00	2008-12-08 13:00:00	1000.00	1900.00	1500.00	100.00	2
3	3	1	1998-11-01 00:00:00	2015-10-20 10:00:00	90.00	100.00	210.00	20.00	2
4	1	1	1998-11-01 00:00:00	1998-12-01 00:00:00	10.00	50.00	25.00	5.00	2
5	6	3	2015-04-04 09:00:00	2015-05-05 09:00:00	15.00	31.00	25.00	2.00	2

## Bids table

ID	Time	Amount	CustomerID	AuctionID	MaxBid	ItemID
1	2015-08-08 09:00:00	600.00	4	3	800.00	3
2	2004-10-24 09:33:43	1500.00	2	1	2000.00	2
3	2004-10-25 09:33:43	1600.00	3	1	1800.00	2
4	2004-10-25 09:33:43	1700.00	2	1	1800.00	2
5	2004-10-25 09:33:44	1800.00	3	1	1800.00	2
6	2004-10-25 09:33:45	1900.00	2	1	1900.00	2
7	1998-11-04 14:24:00	30.00	4	4	40.00	1
8	1998-11-08 19:13:00	50.00	3	4	55.00	1
9	2015-04-10 12:12:34	20.00	4	5	25.00	6
10	2015-04-11 23:11:14	25.00	1	5	35.00	6
11	2015-04-14 12:12:34	30.00	2	5	30.00	6
12	2015-04-14 12:12:35	31.00	1	5	35.00	6

## Wins table

BidID	Time	CustomerID	AuctionID
6	2008-12-08 13:00:00	2	1
1	2015-08-08 09:00:00	4	3
8	1998-12-01 00:00:00	3	4
12	2015-05-05 00:00:00	1	5

## Searches table

CustomerID	ItemID	Frequency
2	2	1
3	4	2

## Manager Level Transactions

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### Add, Modify and Delete employees

#### Add

#### Format

#### Parameters :

1. ?ssn : Social security of employee. String, 12 characters
2. ?lastName : Last name of employee. String, upto 30 characters
3. ?firstName : First name of employee. String, upto 30 characters
4. ?address : Address of employee. String, upto 100 characters
5. ?city : City where employee lives. String, upto 30 characters
6. ?state : State where employee lives. String, upto 30 characters
7. ?zipCode : Zip code of employee. Integer.

8. ?startDate : Date when employee started. Format yyyy-mm-dd
9. ?hourlyRate : Employee's hourly salary. Decimal Format 10.2f
10. ?type : Type of employee. "Manager", "Employee", or "Customer Representative"

#### START TRANSACTION;

**INSERT INTO** Employees(SSN, LastName, FirstName, Address, City, State, ZipCode, Telephone, StartDate, HourlyRate, **Type**)

**VALUES** (?ssn, ?lastName, ?firstName, ?address, ?city, ?state, ?zipcode, ?phone, ?startDate, ?hourlyRate, ?**type**);

**COMMIT;**

### Sample Call

```
SQL> INSERT INTO Employees(SSN, LastName, FirstName, Address, City, State, ZipCode, Telephone, StartDate, HourlyRate, Type)
VALUES ('345-45-123', 'Tarbell', 'Billy', '4232 Summit Park Avenue', 'Brewton', 'AL', 36426, '251-212-0863', '1994-02-02 00:00:00', 60.00, 'CustRep')
[2015-10-27 12:48:20] 1 row affected in 53ms
```

SSN	LastName	FirstName	Address	City	State	ZipCode	Telephone	StartDate	HourlyRate	Type	ID
123-45-6789	Smith	David	123 College Road	Stony Brook	NY	11790	(516) 215-2345	1998-11-01	60.00	Manager	1
789-12-3456	Warren	David	456 Sunken Street	Stony Brook	NY	11794	(516) 632-9987	1994-02-02	50.00	Employee	2
781-14-3126	Karl	Kyle	123 Broad Street	Bell	NY	11241	(516) 212-1234	2003-10-07	50.00	Employee	3
345-45-123	Tarbell	Billy	4232 Summit Park Avenue	Brewton	AL	36426	251-212-0863	1994-02-02	60.00	CustRep	4

### Modify

#### Format

#### Parameters :

1. ?FirstName : First name of Employee. String upto 30 characters
2. ?id : ID of employee. Integer

#### START TRANSACTION;

**UPDATE** Employees

**SET** FirstName = ?FirstName

**WHERE** ID = ?id

**COMMIT**

### Sample Call

```
sql> UPDATE Employees
SET FirstName = 'Kyle'
WHERE ID = 4
[2015-10-27 13:18:38] 1 row affected in 153ms
```

SSN	LastName	FirstName	Address	City	State	ZipCode	Telephone	StartDate	HourlyRate	Type	ID
123-45-6789	Smith	David	123 College Road	Stony Brook	NY	11790	(516) 215-2345	1998-11-01	60.00	Manager	1
789-12-3456	Warren	David	456 Sunken Street	Stony Brook	NY	11794	(516) 632-9987	1994-02-02	50.00	Employee	2
781-14-3126	Karl	Kyle	123 Broad Street	Bell	NY	11241	(516) 212-1234	2003-10-07	50.00	Employee	3
345-45-123	Tarbell	Kyle	4232 Summit Park Avenue	Brewton	AL	36426	251-212-0863	1994-02-02	60.00	CustRep	4

## Delete

### Format

#### Parameters :

1. ID of the employee to be deleted. Integer

```
BEGIN TRANSACTION;
DELETE FROM Employees
WHERE ID = ?id
COMMIT;
```

### Sample Call

```
sql> DELETE FROM Employees
WHERE ID = 4
[2015-10-27 13:19:54] 1 row affected in 151ms
```

SSN	LastName	FirstName	Address	City	State	ZipCode	Telephone	StartDate	HourlyRate	Type	ID
123-45-6789	Smith	David	123 College Road	Stony Brook	NY	11790	(516) 215-2345	1998-11-01	60.00	Manager	1
789-12-3456	Warren	David	456 Sunken Street	Stony Brook	NY	11794	(516) 632-9987	1994-02-02	50.00	Employee	2
781-14-3126	Karl	Kyle	123 Broad Street	Bell	NY	11241	(516) 212-1234	2003-10-07	50.00	Employee	3

## Obtain a sales report for a particular month

### Format

```
CREATE VIEW Sales_Report AS
SELECT Items.ID AS ItemID, Bids.ID AS BidID, Customers.ID AS CustomerID,
```

```

Employees.ID AS MonitorID, Wins.Time AS Time, concat(Customers.LastName, ' ',
Customers.FirstName) AS BoughtBy, Bids.Amount AS Amount, Customers.Email
As Email, Items.Name AS ItemName, Items.Type AS ItemType,
concat(Employees.FirstName, ' ', Employees.LastName) AS MonitorName
FROM Wins, Bids, Customers, Items, Employees, Auctions
WHERE Wins.BidID = Bids.ID
AND Bids.CustomerID = Customers.ID
AND Bids.ItemID = Items.ID
AND Bids.AuctionID = Auctions.ID
AND Auctions.EmployeeID = Employees.ID;

SELECT * FROM Sales_Report;

```

## Sample Call

```

sql> CREATE VIEW Sales_Report AS
SELECT Items.ID AS ItemID, Bids.ID AS BidID, Customers.ID AS CustomerID, Employees.ID AS MonitorID, Wins.Time AS Time, concat(Customers.LastName, ' ',
FROM Wins, Bids, Customers, Items, Employees, Auctions
WHERE Wins.BidID = Bids.ID
AND Bids.CustomerID = Customers.ID
AND Bids.ItemID = Items.ID
AND Bids.AuctionID = Auctions.ID
AND Auctions.EmployeeID = Employees.ID
[2015-10-27 13:26:43] completed in 37ms
sql> SELECT * FROM Sales_Report
[2015-10-27 13:27:18] 4 rows retrieved starting from 1 in 2s 585ms (execution: 2s 543ms, fetching: 42ms)

```

ItemID	BidID	CustomerID	MonitorID	Time	BoughtBy	Amount	Email	ItemName	ItemType	MonitorName
2	6	2	2	2008-12-08 13:00:00	Finch Atticus	1900.00	finch@gmail.com	Nissan Sentra	Car	David Warren
3	1	4	2	2015-08-08 09:00:00	Du Haixia	600.00	dhaixia@cs.sunysb.edu	Gamecube	Game	David Warren
1	8	3	2	1998-12-01 00:00:00	Lu Shiyong	50.00	shiyong@cs.sunysb.edu	Titanic	DVD	David Warren
6	12	1	2	2015-05-05 00:00:00	Smith John	31.00	shlu@ic.sunysb.edu	GTA V	Game	David Warren

## Comprehensive Listing of all items

### Format

```
SELECT * FROM Items
```

### Sample Call

```

sql> SELECT * FROM Items
[2015-10-27 13:30:31] 6 rows retrieved starting from 1 in 58ms (execution: 44ms, fetching: 14ms)

```

ID	Name	Type	ManufactureYear	CopiesSold	Stock
1	Titanic	DVD	2005	1	2
2	Nissan Sentra	Car	2007	1	3
3	Gamecube	Game	2001	0	3
4	Scott Pilgrim	DVD	2010	0	2
5	Inception	DVD	2010	0	10
6	GTA V	Game	2014	0	10

Produce a list of sales by item name or by customer name

List of sales by item name

Format

**Parameters :**

1. ?itemName : Name of item. String upto 30 characters

```
SELECT * FROM Sales_Report WHERE ItemName = ?itemName
```

Sample Call

```
sql> SELECT * FROM Sales_Report WHERE ItemName = 'Titanic'
[2015-10-27 13:32:00] 1 row retrieved starting from 1 in 147ms (execution: 134ms, fetching: 13ms)
```

ItemID	BidID	CustomerID	MonitorID	Time	BoughtBy	Amount	Email	ItemName	ItemType	MonitorName
1	8	3	2	1998-12-01 00:00:00	Lu Shiyong	50.00	shiyong@cs.sunysb.edu	Titanic	DVD	David Warren

List of sales by customer name

Format

**Parameters :**

1. ?name : Name of Customer. String upto 60 characters

```
SELECT * FROM Sales_Report WHERE BoughtBy = ?name;
```

Sample Call

```
sql> SELECT * FROM Sales_Report WHERE BoughtBy = 'Du Haixia'
[2015-10-27 13:33:29] 1 row retrieved starting from 1 in 62ms (execution: 45ms, fetching: 17ms)
```

ItemID	BidID	CustomerID	MonitorID	Time	BoughtBy	Amount	Email	ItemName	ItemType	MonitorName
3	1	4	2	2015-08-08 09:00:00	Du Haixia	600.00	dhaixia@cs.sunysb.edu	Gamecube	Game	David Warren

## Revenue generated

By ItemName

Format

**Parameters :**

1. ?itemName : Name of item. String upto 30 characters

```
SELECT SUM(Amount) AS Revenue, COUNT(Amount) AS CopiesSold from
Sales_Report where ItemName = ?itemName;
```

Sample Call

```
sql> SELECT SUM(Amount) AS Revenue, COUNT(Amount) AS CopiesSold from Sales_Report where ItemName = 'Titanic'
[2015-10-27 13:38:14] 1 row retrieved starting from 1 in 189ms (execution: 177ms, fetching: 12ms)
```

Revenue	CopiesSold
50.00	1

By ItemType

Format

**Parameters :**

1. ?itemType : Type of item. String upto 30 characters

```
SELECT ItemName, SUM(Amount) AS Revenue, COUNT(Amount) AS CopiesSold
FROM Sales_Report WHERE ItemType = ?itemType GROUP BY ItemName;
```

Sample Call

```
sql> SELECT SUM(Amount) AS Revenue, COUNT(Amount) AS CopiesSold from Sales_Report where ItemName = 'Titanic'
[2015-10-27 13:38:14] 1 row retrieved starting from 1 in 189ms (execution: 177ms, fetching: 12ms)
```



Revenue	CopiesSold
50.00	1

## By CustomerName

Format

### Parameters :

1. ?customerName : Name of customer. String upto 60 chars

```
SELECT ItemName, SUM(Amount) AS Revenue, COUNT(Amount) AS CopiesSold
FROM Sales_Report WHERE BoughtBy = ?customerName GROUP BY ItemName
```

### Sample Call

```
sql> SELECT ItemType, SUM(Amount) AS Revenue, COUNT(Amount) AS CopiesSold
FROM Sales_Report
WHERE BoughtBy = 'Du Haixia'
GROUP BY ItemType
[2015-10-27 13:58:59] 1 row retrieved starting from 1 in 86ms (execution: 70ms, fetching: 16ms)
```

ItemType	Revenue	CopiesSold
Game	600.00	1

## Max revenue generated by customer representative

Format

```
SELECT SUM(Amount) AS Revenue, COUNT(Amount) AS ItemsSold
FROM Sales_Report
GROUP BY MonitorID
ORDER BY Revenue DESC
LIMIT 1
```

### Sample Call

```
sql> SELECT SUM(Amount) AS Revenue, COUNT(Amount) AS ItemsSold
FROM Sales_Report
GROUP BY MonitorID
ORDER BY Revenue DESC
LIMIT 1
[2015-10-27 15:05:32] 1 row retrieved starting from 1 in 48ms (execution: 37ms, fetching: 11ms)
```

Revenue	ItemsSold
2581.00	4

## Max Revenue generated by customer

Format

```
SELECT BoughtBy as CustomerName, CustomerID, SUM(Amount) AS Revenue,
COUNT(Amount) AS ItemsPurchased
FROM Sales_Report
GROUP BY CustomerID
ORDER BY Revenue DESC
LIMIT 1
```

Sample Call

```
sql> SELECT BoughtBy as CustomerName, CustomerID, SUM(Amount) AS Revenue, COUNT(Amount) AS ItemsPurchased
FROM Sales_Report
GROUP BY CustomerID
ORDER BY Revenue DESC
LIMIT 1
[2015-10-27 15:09:22] 1 row retrieved starting from 1 in 79ms (execution: 70ms, fetching: 9ms)
```

CustomerName	CustomerID	Revenue	ItemsPurchased
Finch Atticus	2	1900.00	1

## Best Sellers

Format

```
SELECT ItemName, SUM(Amount) AS Revenue, COUNT(Amount) AS CopiesSold
FROM Sales_Report
GROUP BY ItemID
```

```
ORDER BY Revenue DESC
LIMIT 10
```

### Sample Call

```
sql> SELECT ItemName, SUM(Amount) AS Revenue, COUNT(Amount) AS CopiesSold
FROM Sales_Report
GROUP BY ItemID
ORDER BY Revenue DESC
LIMIT 10
[2015-10-27 15:12:07] 4 rows retrieved starting from 1 in 53ms (execution: 44ms, fetching: 9ms)
```

ItemName	Revenue	CopiesSold
Nissan Sentra	1900.00	1
Gamecube	600.00	1
Titanic	50.00	1
GTAV	31.00	1

## Customer Representative level Transactions

### Record a sale

#### Parameters :

1. ?BidID: ID of the bid. Integer
2. ?Time: Time the sale was made. Date value
3. ?CustomerID: ID of the customer partaking in the bid. Integer
4. ?AuctionID: ID of the auction where the bid is happening. Integer
5. ?CopiesSold: number of copies sold of that item. Integer
6. ?STOCK: how much of that item is in inventory. Integer
7. ?ID: ID of the item being updated. Integer

#### Sample Call :

```
START TRANSACTION;
```

```
INSERT INTO Wins (BidID, Time, CustomerID, AuctionID)
VALUES ('3','2015-08-08 09:00:00','1', '3');
```

```
UPDATE Items
SET CopiesSold = CopiesSold + 1, Stock=Stock-1
WHERE ID=1
```

```
UPDATE Customers
SET ItemsPurchased=ItemsPurchased+1
WHERE ID IN
  (SELECT SellerID from Auctions
   WHERE ID IN (SELECT AuctionsID from Wins Where CustomerID = 1));
```

```
UPDATE Customers
SET ItemsSold=ItemsSold+=1
WHERE ID IN
```

## Add, Edit, Delete information for a customer

### Add

#### Format

```
START TRANSACTION;
  INSERT INTO Customers (ID, LastName, FirstName, Address, City, State,
ZipCode, Telephone, Email, CreditCardNumber,ItemsSold,ItemsPurchased,Rating)
  Values ('?ID', '?LastName', '?FirstName', '?Address', '?City', '?NY', '?Zipcode', '?
Telephone', '?email', '?CreditCardNumber', '?ItemsSold','?ItemsPurchased','?Rating')
COMMIT;
```

### Parameters :

1. ?ID: ID of the customer: Integer
2. ?lastName: Last name of the customer. String, up to 30 characters

3. ?firstName : First name of customer. String, upto 30 characters
4. ?address : Address of customer. String, upto 100 characters
5. ?city : City where customer lives. String, upto 30 characters
6. ?state : State where customer lives. String, upto 30 characters
7. ?zipCode : Zip code of customer. Integer.

Sample Call :

**START TRANSACTION;**

**INSERT INTO** Customers (ID, LastName, FirstName, Address, City, State, ZipCode, Telephone, Email, CreditCardNumber, ItemsSold, ItemsPurchased, Rating)  
**Values** ('5', 'Allen', 'Barry', 'Flash 52', 'Central City', 'NY', '11790', '516 121 1212', 'flash@gmail.com', '1212-1212-1212-1212', '0', '0', '3')

**COMMIT;**

TABLES & VIEWS

Auctions

Bids

Customers

Employees

Items

receipt

Sales\_Report

Searches

view\_employees

Wins

Search: ID

Q Search

Filter

ID	LastName	FirstName	Address	City	State	ZipCode	Telephone	Email	CreditCardNumber	ItemsSold	ItemsPurchased	Rating
1	Smith	John	789 Peace Blvd	Los Angeles	CA	12345	(412) 443-4321	shlu@ic.sunysb.edu	2345-6789-2345-6789	3	0	3
2	Finch	Atticus	Happy 987	Stony Brook	NY	11790	516 111 11111	finch@gmail.com	1111-1111-1111-1111	0	1	3
3	Lu	Shiyong	123 Success Street	Stony Brook	NY	11790	(516) 632-8959	shiyong@cs.sunysb.edu	1234-5678-1234-5678	0	2	3
4	Du	Haixia	456 Fortune Road	Stony Brook	NY	11790	(516) 632-4360	dhaixia@cs.sunysb.edu	5678-1234-5678-1234	0	1	3

---->

TABLES & VIEWS													
<div><div>Search: ID</div><div>Q Search</div><div>Filter</div></div>													
<div><div>Auctions</div><div>Bids</div><div>Customers</div><div>Employees</div><div>Items</div><div>receipt</div></div>	ID	LastName	FirstName	Address	City	State	ZipCode	Telephone	Email	CreditCardNumber	ItemsSold	ItemsPurchased	Rating
	1	Smith	John	789 Peace Blvd	Los Angeles	CA	12345	(412) 443-4321	shlu@ic.sunysb.edu	2345-6789-2345-6789	3	0	3
	2	Finch	Atticus	Happy 987	Stony Brook	NY	11790	516 111 11111	finch@gmail.com	1111-1111-1111-1111	0	1	3
	3	Lu	Shiyong	123 Success Street	Stony Brook	NY	11790	(516) 632-8959	shiyong@cs.sunysb.edu	1234-5678-1234-5678	0	2	3
	4	Du	Haixia	456 Fortune Road	Stony Brook	NY	11790	(516) 632-4360	dhaixia@cs.sunysb.edu	5678-1234-5678-1234	0	1	3
	5	Allen	Barry	Flash 52	Central City	NY	11790	516 121 1212	flash@gmail.com	1212-1212-1212-1212	0	0	3

Edit

Format

**START TRANSACTION;**

**UPDATE** Customers

**SET** LastName='?LastName', FirstName='?FirstName', Address='?Address',  
City='?City', State='?State', ZipCode=?Zipcode, Telephone='?Telephone', Email=  
'?Email', CreditCardNumber='?CreditCardNumber', ItemsSold=  
'?ItemsSold', ItemsPurchased='?ItemsPurchased', Rating=?Rating

**WHERE** ID=?ID

**COMMIT;**

## Parameters :

1. ?lastName : Last name of customer. String, upto 30 characters
2. ?firstName : First name of customer. String, upto 30 characters
3. ?address : Address of customer. String, upto 100 characters
4. ?city : City where customer lives. String, upto 30 characters
5. ?state : State where customer lives. String, upto 30 character
6. ?zipCode : Zip code of customer. Integer.
7. ?telephone: telephone number of customer: String, up to 20 characters
8. ?email: email of customer: String, up to 60 characters
9. ?ID: id of customer to be updated

## Sample Call :

```
START TRANSACTION;
UPDATE Customers
SET LastName='Lang', FirstName='Lana', Address= '777 Hope Street', City=
'Smallville', State= 'NY', ZipCode= 11111, Telephone= '(516)888-8888', Email=
'lane@gmail.com' , CreditCardNumber= '1233-4444-5555-
6666',ItemsSold='12',ItemsPurchased='3',Rating=1
WHERE ID=1
COMMIT;
```

Search: ID = Q Search Filter												
ID	LastName	FirstName	Address	City	State	ZipCode	Telephone	Email	CreditCardNumber	ItemsSold	ItemsPurchased	Rating
1	Smith	John	789 Peace Blvd	Los Angeles	CA	12345	(412) 443-4321	shlu@ic.sunysb.edu	2345-6789-2345-6789	3	0	3
2	Finch	Atticus	Happy 987	Stony Brook	NY	11790	516 111 11111	finch@gmail.com	1111-1111-1111-1111	0	1	3
3	Lu	Shiyong	123 Success Street	Stony Brook	NY	11790	(516) 632-8959	shiyong@cs.sunysb.edu	1234-5678-1234-5678	0	2	3
4	Du	Haixia	456 Fortune Road	Stony Brook	NY	11790	(516) 632-4360	dhaixia@cs.sunysb.edu	5678-1234-5678-1234	0	1	3
5	Allen	Barry	Flash 52	Central City	NY	11790	516 121 1212	flash@gmail.com	1212-1212-1212-1212	0	0	3

----->

Search: ID = Q Search Filter												
ID	LastName	FirstName	Address	City	State	ZipCode	Telephone	Email	CreditCardNumber	ItemsSold	ItemsPurchased	Rating
1	Lang	Lana	777 Hope Street	Smallville	NY	11111	(516)888-8888	lane@gmail.com	1233-4444-5555-6666	12	3	1
2	Finch	Atticus	Happy 987	Stony Brook	NY	11790	516 111 11111	finch@gmail.com	1111-1111-1111-1111	0	1	3
3	Lu	Shiyong	123 Success Street	Stony Brook	NY	11790	(516) 632-8959	shiyong@cs.sunysb.edu	1234-5678-1234-5678	0	2	3
4	Du	Haixia	456 Fortune Road	Stony Brook	NY	11790	(516) 632-4360	dhaixia@cs.sunysb.edu	5678-1234-5678-1234	0	1	3
5	Allen	Barry	Flash 52	Central City	NY	11790	516 121 1212	flash@gmail.com	1212-1212-1212-1212	0	0	3

## Delete

```
START TRANSACTION;
DELETE FROM Customers
WHERE ID=?ID;
```

```
COMMIT;
```

## Parameters :

1. ?ID: ID of customer to be deleted: Integer

Sample Call :

```
START TRANSACTION;
DELETE FROM Customers
WHERE ID=5;
COMMIT;
```

TABLES & VIEWS		Search: ID = <input type="text"/> Q Search <input type="button" value="Filter"/>										
<input checked="" type="checkbox"/> Auctions		ID	LastName	FirstName	Address	City	State	ZipCode	Telephone	Email	CreditCardNumber	ItemsSold
<input checked="" type="checkbox"/> Bids		1	Lang	Lana	777 Hope Street	Smallville	NY	11111	(516)888-8888	lana@gmail.com	1233-4444-5555-6666	12
<input checked="" type="checkbox"/> Customers		2	Finch	Atticus	Happy 987	Stony Brook	NY	11790	516 111 11111	finch@gmail.com	1111-1111-1111-1111	0
<input checked="" type="checkbox"/> Employees		3	Lu	Shiyong	123 Success Street	Stony Brook	NY	11790	(516) 632-8959	shiyong@cs.sunysb.edu	1234-5678-1234-5678	0
<input checked="" type="checkbox"/> Items		4	Du	Haixia	456 Fortune Road	Stony Brook	NY	11790	(516) 632-4360	dhaixia@cs.sunysb.edu	5678-1234-5678-1234	0
<input checked="" type="checkbox"/> receipt		5	Allen	Barry	Flash 52	Central City	NY	11790	516 121 1212	flash@gmail.com	1212-1212-1212-1212	0
<input checked="" type="checkbox"/> Sales_Report												0
												3

---->

TABLES & VIEWS		Search: ID = <input type="text"/> Q Search <input type="button" value="Filter"/>										
<input checked="" type="checkbox"/> Auctions		ID	LastName	FirstName	Address	City	State	ZipCode	Telephone	Email	CreditCardNumber	ItemsSold
<input checked="" type="checkbox"/> Bids		1	Lang	Lana	777 Hope Street	Smallville	NY	11111	(516)888-8888	lana@gmail.com	1233-4444-5555-6666	12
<input checked="" type="checkbox"/> Customers		2	Finch	Atticus	Happy 987	Stony Brook	NY	11790	516 111 11111	finch@gmail.com	1111-1111-1111-1111	0
<input checked="" type="checkbox"/> Employees		3	Lu	Shiyong	123 Success Street	Stony Brook	NY	11790	(516) 632-8959	shiyong@cs.sunysb.edu	1234-5678-1234-5678	0
<input checked="" type="checkbox"/> Items		4	Du	Haixia	456 Fortune Road	Stony Brook	NY	11790	(516) 632-4360	dhaixia@cs.sunysb.edu	5678-1234-5678-1234	0
<input checked="" type="checkbox"/> receipt												1
<input checked="" type="checkbox"/> Sales_Report												3

###Produce customer mailing lists

Format

```
START TRANSACTION;
SELECT Email, concat(Customers.?LastName, ' ', Customers.?FirstName) AS
Name
FROM Customers
COMMIT;
```

## Parameters :

1. ?email: email of customer. String, up to 60 characters
2. ?lastname: last name of customer. String, up to 30 characters
3. ?firstname: first name of customer. String, up to 30 characters

Sample Call :

```
START TRANSACTION;
SELECT Email, concat(Customers.LastName, ' ', Customers.FirstName) AS Name
FROM Customers
COMMIT;
```

1	SELECT	Email, concat(Customers.LastName, ' ', Customers.FirstName) AS Name
2	FROM	Customers

Email	Name
lana@gmail.com	Lang Lana
finch@gmail.com	Finch Atticus
shiyong@cs.sunysb.edu	Lu Shiyong
dhaixia@cs.sunysb.edu	Du Haixia

## Customer level Transactions

### Find bid history for an auction

Format

#### Parameters :

1. ?aID : the ID of the Auction you want to see the bid history of

```
START TRANSACTION;
SELECT *
FROM Bids
WHERE AuctionID = ?aID;
COMMIT;
```

Sample Call



```
1 SELECT * FROM Bids WHERE AuctionID = 3
```

<span>⚙️</span> <span>Query Favorites ▾</span> <span>Query History ▾</span>						
ID	Time	Amount	CustomerID	AuctionID	MaxBid	ItemID
6	2015-08-08 09:00:00	600.00	4	3	800.00	3

Find current and past auctions a customer has taken part in

Format

### Parameters :

1. ?custID = the ID of the Customer you want see the current/past auctions of

```
START TRANSACTION;
SELECT *
FROM Auctions
WHERE ID IN (
  SELECT AuctionID
  FROM Bids
  WHERE CustomerID = ?custID
);
COMMIT;
```

Sample Call

```
1 SELECT * FROM Auctions WHERE ID IN (SELECT AuctionID FROM Bids WHERE CustomerID = 4)
```

ID	ItemID	SellerID	OpeningTime	ClosingTime	OpeningBid	CurrentBid	Reserve	Increment	EmployeeID
3	3	2	1998-11-01 00:00:00	2015-10-20 10:00:00	500.00	100.00	750.00	20.00	123-45-6789

## Items sold by a given seller and corresponding auction info

Format

### Parameters :

1. ?sellerID = the ID of the customer who's sold

```
START TRANSACTION;
SELECT *
FROM Auctions
WHERE SellerID = ?sellerID;
COMMIT;
```

### Sample Call

```
1 SELECT * FROM Auctions WHERE SellerID = 2
```

ID	ItemID	SellerID	OpeningTime	ClosingTime	OpeningBid	CurrentBid	Reserve	Increment	EmployeeID
1	2	2	1998-11-01 00:00:00	2008-12-08 13:00:00	1000.00	1000.00	2000.00	10.00	123-45-6789
3	3	2	1998-11-01 00:00:00	2015-10-20 10:00:00	500.00	100.00	750.00	20.00	123-45-6789

# Items available of a particular type and corresponding auction info

Format

## Parameters :

1. ?itemType = the type of the Item you want to see auctions for (e.g. 'DVD', 'Car')

```
START TRANSACTION;
SELECT *
FROM Auctions
WHERE ItemID IN (
  SELECT ID
  FROM Items
  WHERE Type = ?itemType
);
COMMIT;
```

## Sample Call

1

SELECT \* FROM Auctions WHERE ItemID IN (SELECT ID FROM Items WHERE Type = 'DVD');

⚙

Query Favorites

Query History

ID	ItemID	SellerID	OpeningTime	ClosingTime	OpeningBid	CurrentBid	Reserve	Increment	EmployeeID
4	1	2	1998-11-01 00:00:00	0000-00-00 00:00:00	10.00	20.00	25.00	5.00	123-45-6789

# Items available with a particular keyword or set of keywords in the item name, and corresponding auction info

Format

```

START TRANSACTION;
SELECT *
FROM Auctions
WHERE ID IN (
  SELECT ID
  FROM Items
  WHERE Name
  LIKE '%?keyword%'
);
COMMIT;

```

?keyword = the keywords you want to match

### Sample Call

1

SELECT \* FROM Auctions WHERE ID IN (SELECT ID FROM Items WHERE Name LIKE '%tita%')

⚙

Query Favorites

Query History

ID	ItemID	SellerID	OpeningTime	ClosingTime	OpeningBid	CurrentBid	Reserve	Increment	EmployeeID
1	2	2	1998-11-01 00:00:00	2008-12-08 13:00:00	1000.00	1000.00	2000.00	10.00	123-45-6789

## Best-Seller list

### Format

```

START TRANSACTION;
SELECT Name
FROM Items
WHERE ID IN (
  SELECT ItemID
  FROM Auctions
  WHERE ID IN (
    SELECT AuctionID
    FROM Wins

```

```

)
);
COMMIT;

```

## Sample Call

1	SELECT Name FROM Items WHERE ID IN (SELECT ItemID FROM Auctions WHERE ID IN (SELECT AuctionID FROM Wins))
---	---

⚙️	Query Favorites ▾	Query History ▾
Name		
Gamecube		

## Personalized item suggestion list

### Format

```

START TRANSACTION;
SELECT Name
FROM Items
WHERE Type IN (
  SELECT Type
  FROM Items
  WHERE ID IN (
    SELECT ItemID
    FROM Searches
    WHERE CustomerID = ?custID
  )
)
AND
Items.Name NOT IN (
  SELECT Name
  FROM Items

```

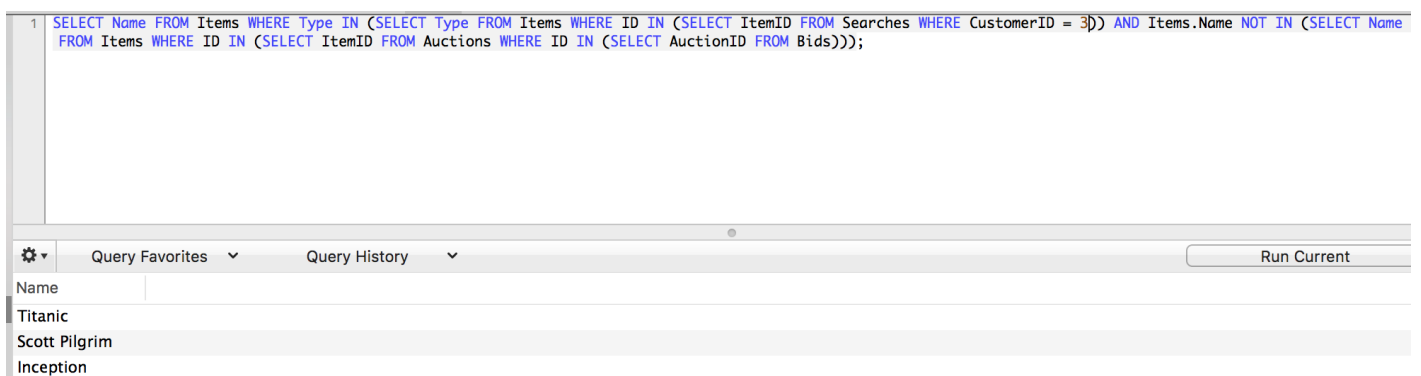
```

WHERE ID IN (
  SELECT ItemID
  FROM Auctions
  WHERE ID IN (
    SELECT AuctionID
    FROM Bids
  )
);
COMMIT;

```

?custID = the ID of the customer who we're creating a suggestion list for

### Sample Call



A view for customer representatives to read employee information, except for the hourly rate and SSN.

### Format

```

START TRANSACTION;
CREATE VIEW view_employees AS (
  SELECT LastName, FirstName, Address, City, State, ZipCode, Telephone,
  StartDate, Type
  FROM Employees
);
COMMIT;

```

### Sample Call

Auctions	LastName	FirstName	Address	City	State	ZipCode	Telephone	StartDate	Type
Bids	Smith	David	123 College Road	Stony Brook	NY	11790	(516)215-2345	1998-11-01	NULL
Customers	Warren	David	456 Sunken Street	Stony Brook	NY	11794	(516) 632-9987	1994-02-02	NULL
Employees									
Items									
receipt									
Sales_Report									
Searches									
view_employees									

A view of a receipt of an order from a customer.

## Format

```

START TRANSACTION;
CREATE VIEW receipt AS (
  SELECT C.Id, C.LastName, C.FirstName, C.Address, C.City, C.State, C.ZipCode,
  C.Telephone, C.Email, C.CreditCardNumber, I.Name, W.Time, W.AuctionID,
  A.CurrentBid
  FROM Customers C, Items I, Wins W, Auctions A
  WHERE W.CustomerID = C.ID AND W.AuctionID = A.ID AND A.ItemID = I.ID
);
COMMIT;

```

## Sample Call

Auctions	Id	LastName	FirstName	Address	City	State	ZipCode	Telephone	Email	CreditCardNumber	Name	1
Bids	4	Du	Haixia	456 Fortune Road	Stony Brook	NY	11790	(516) 632-4360	dhaixia@cs.sunysb.edu	5678-1234-5678-1234	Gamecube	2
Customers												
Employees												
Items												
receipt												