

CSE 305 Group Assignment 2

Team Avatar'); DROP TABLE students;--

Website Name : www.ebae.com

Members

1. Aditya Balwani : aditya.balwani@stonybrook.edu
2. Halaa Menasy : halaa.menasy@stonybrook.edu
3. Philippe Kimura-Thollander : philippe.kimura-thollander@stonybrook.edu

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

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;
```

page-break

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
GTA V	31.00	1

Customer Representative level Transactions

Record a sale

Format

Parameters : ?BidID: ID of the bid. Integer ?Time: Time the sale was made. Date value ?WinnerID: ID of the customer who won the auction. Integer ?AuctionID: ID of the auction. Integer ?ItemID: ID of the item being updated. Integer

```
START TRANSACTION;
INSERT INTO Wins (BidID, Time, CustomerID, AuctionID)
VALUES (?BidID, ?Time, ?WinnerID, ?AuctionID);
```

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

```
UPDATE Customers
SET ItemsSold=ItemsSold+1
WHERE ID = (SELECT SellerID
FROM Auctions
WHERE ID = ?AuctionID);
```

```
UPDATE Customers
SET ItemsPurchased=ItemsPurchased+1
WHERE ID = ?WinnerID
COMMIT;
```

Sample Call :

```

START TRANSACTION;
INSERT INTO Wins (BidID, Time, CustomerID, AuctionID)
VALUES (6,"2008-12-08 13:00:00",2, 1);

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

UPDATE Customers
SET ItemsSold=ItemsSold+1
WHERE ID = (SELECT SellerID
            FROM Auctions
            WHERE ID = 1);

UPDATE Customers
SET ItemsPurchased=ItemsPurchased+1
WHERE ID = 2
COMMIT;

```

Wins Table

TABLES & VIEWS				
Search: BidID =				
Auctions	BidID	Time	CustomerID	AuctionID
Bids	1	2015-08-08 09:00:00	4	3
Customers	8	1998-12-01 00:00:00	3	4
Employees	12	2015-05-05 00:00:00	1	5
Items				
receipt				
Sales_Report				
Searches				
view_employees				
Wins				

----->

TABLES & VIEWS				
Search: BidID =				
Auctions	BidID	Time	CustomerID	AuctionID
Bids	6	2008-12-08 13:00:00	2	1
Customers	1	2015-08-08 09:00:00	4	3
Employees	8	1998-12-01 00:00:00	3	4
Items	12	2015-05-05 00:00:00	1	5
receipt				
Sales_Report				
Searches				
view_employees				
Wins				

Items Table

(MySQL 5.5.44-Ubuntu)

Select Database Structure Content Relations Triggers Table Info Query

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Search: ID =

ID	Name	Type	ManufactureYear	CopiesSold	Stock
1	Titanic	DVD	2005	0	3
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	GTAV	Game	2014	0	10

----->

Search: ID =

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	GTAV	Game	2014	0	10

Customers Table

Search: ID =

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	2	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

----->

Search: ID =

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	2	3
3	Lu	Shiyong	123 Success Street	Stony Brook	NY	11790	(516) 632-8959	shiyong@cs.sunysb.edu	1234-5678-1234-5678	2	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

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;

Search: ID = <input type="text"/> <input type="button" value="Q Search"/> <input type="button" value="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	

---->

Search: ID = <input type="text"/> <input type="button" value="Q Search"/> <input type="button" value="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	

Edit

Format

START TRANSACTION;

UPDATE Customers

SET LastName='?LastName', FirstName='?FirstName', Address= '?Address', City= '?City', State= '?State', ZipCode= ? Zipcde, 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= 'lana@gmail.com' , CreditCardNumber= '1233-4444-5555-6666',ItemsSold='12',ItemsPurchased='3',Rating=1
WHERE ID=1
COMMIT;
```

TABLES & VIEWS													
<div> <div>Search: ID</div> <div>=</div> <div>Q Search</div> <div>Filter</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	0	3
2	Finch	Atticus	Happy 987	Stony Brook	NY	11790	516 111 11111	finch@gmail.com	1111-1111-1111-1111	0	1	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	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	1	3
5	Allen	Barry	Flash 52	Central City	NY	11790	516 121 1212	flash@gmail.com	1212-1212-1212-1212	0	0	0	3

---->

TABLES & VIEWS													
<div> <div>Search: ID</div> <div>=</div> <div>Q Search</div> <div>Filter</div> </div>													
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	lana@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	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	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	1	3
5	Allen	Barry	Flash 52	Central City	NY	11790	516 121 1212	flash@gmail.com	1212-1212-1212-1212	0	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								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	lana@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	

TABLES & VIEWS													
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	lana@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	

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

```

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)

⚙

Query Favorites

Query History

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')
```

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

1SELECT * 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	<code>SELECT Name FROM Items WHERE ID IN (SELECT ItemID FROM Auctions WHERE ID IN (SELECT AuctionID FROM Wins))</code>
<div>  Query Favorites ▾ Query History ▾ </div>	
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

```
1 SELECT Name FROM Items WHERE Type IN (SELECT Type FROM Items WHERE ID IN (SELECT ItemID FROM Searches WHERE CustomerID = 3)) AND Items.Name NOT IN (SELECT Name
FROM Items WHERE ID IN (SELECT ItemID FROM Auctions WHERE ID IN (SELECT AuctionID FROM Bids)));
```

Query Favorites Query History Run Current

Name

Titanic

Scott Pilgrim

Inception

A view for customer representatives to read employee in**Formation**, 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

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

<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	Name
	4	Du	Haixia	456 Fortune Road	Stony Brook	NY	11790	(516) 632-4360	dhaixia@cs.sunysb.edu	5678-1234-5678-1234	Gamecube