Aishwarya Pani
CSE 63
6th Sem
DBMS LAB CS691 Assignment
University Roll number: 12200117063
University Registration number: 171220110007 of 2017-2018

Set 4.

Table Creation:

```
CREATE TABLE Customer (
cust_id NUMBER(4) PRIMARY KEY,
cust_name VARCHAR2(255),
annual_revenue NUMBER(5,2),
cust_type VARCHAR2(20),
CONSTRAINT CHK_id CHECK (cust_id BETWEEN 100 AND 1000),
CONSTRAINT CHK_type CHECK (cust_type IN ('MANUFACTURER', 'WHOLESALER', 'RETAILER')) );

CREATE TABLE City (
city_name VARCHAR2(20) PRIMARY KEY,
population NUMBER(5) );

CREATE TABLE Shipment(
shipment_no NUMBER(3) PRIMARY KEY,
cust_id NUMBER(4),
weight NUMBER(3) CHECK (weight<1000),
truck_no NUMBER(4),
destination VARCHAR(20),
ship_date DATE,
CONSTRAINT FK_cust FOREIGN KEY(cust_id) REFERENCES Customer(cust_id) ON DELETE
CASCADE, CONSTRAINT FK_truck FOREIGN KEY(truck_no) REFERENCES Truck(truck_no),
CONSTRAINT FK_city FOREIGN KEY(destination) REFERENCES City(city_name) );

CREATE TABLE Truck (
truck_no NUMBER(3) PRIMARY KEY,
driver_name VARCHAR2(20) );
```

Inserting values in table:

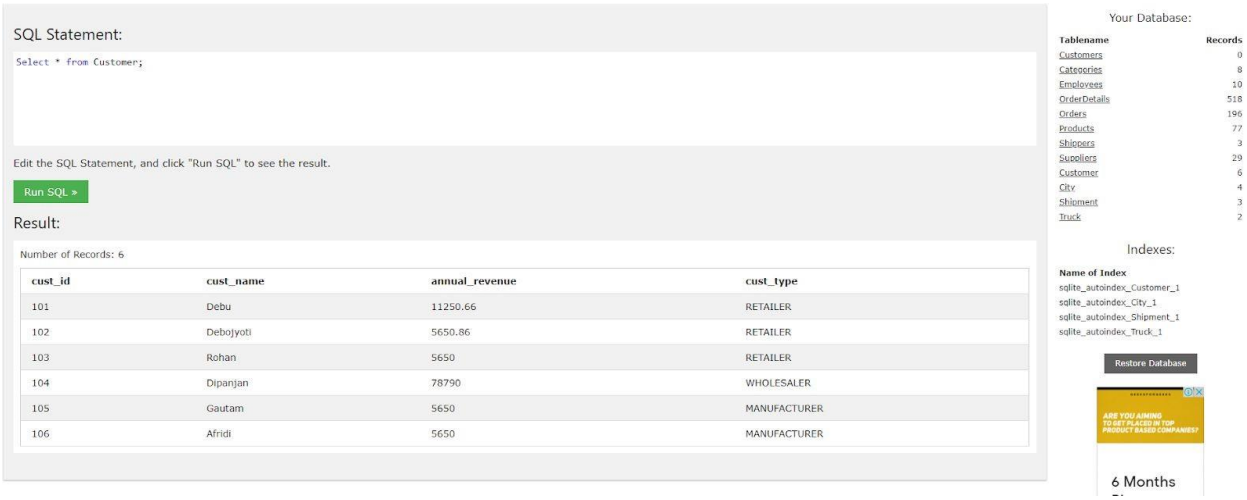
```
INSERT INTO Customer VALUES(101,'Debu',11250.66,'RETAILER');
INSERT INTO Customer VALUES(102,'Debojyoti',5650.86,'RETAILER');
INSERT INTO Customer VALUES(103,'Rohan',5650,'RETAILER');
INSERT INTO Customer VALUES(104,'Dipanjan',78790,'WHOLESALER');
INSERT INTO Customer VALUES(105,'Gautam',5650,'MANUFACTURER');
INSERT INTO Customer VALUES(106,'Afridi',5650,'MANUFACTURER');
```

```
INSERT INTO city VALUES('Kolkata',300000);
INSERT INTO city VALUES('Pune',70000);
INSERT INTO city VALUES('Mumbai',900000);
INSERT INTO city VALUES('Chennai',30000);

INSERT INTO Shipment Values(69,105,880,67,'Mumbai','2018-06-30');
INSERT INTO Shipment Values(68,350,880,87,'Kolkata','2020-06-30');
INSERT INTO Shipment Values(65,105,897,67,'Chennai','2020-06-30');

INSERT INTO Truck values(67,'Salil');
INSERT INTO Truck values(87,'Jamil')
```

Customer Table:



SQL Statement:

```
Select * from Customer;
```

Edit the SQL Statement, and click "Run SQL" to see the result.

Run SQL »

Result:

Number of Records: 6

cust_id	cust_name	annual_revenue	cust_type
101	Debu	11250.66	RETAILER
102	Debojyoti	5650.86	RETAILER
103	Rohan	5650	RETAILER
104	Dipanjan	78790	WHOLESALER
105	Gautam	5650	MANUFACTURER
106	Afridi	5650	MANUFACTURER

Your Database:

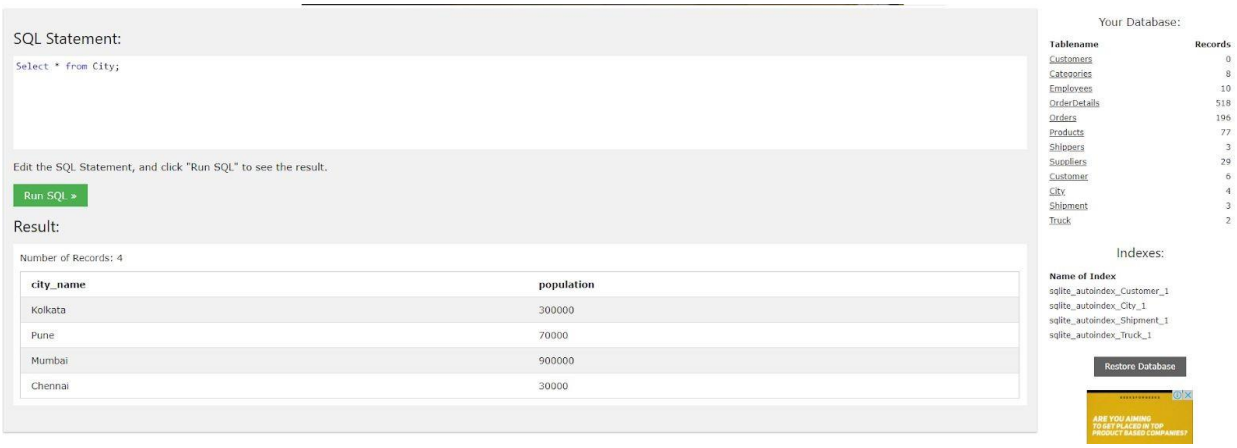
Tablename	Records
Customers	0
Categories	8
Employees	10
OrderDetails	518
Orders	196
Products	77
Shippers	3
Suppliers	29
Customer	6
City	4
Shipment	3
Truck	2

Indexes:

Name of Index
sqlite_autoindex_Customer_1
sqlite_autoindex_City_1
sqlite_autoindex_Shipment_1
sqlite_autoindex_Truck_1

Restore Database

City Table:



SQL Statement:

```
Select * from City;
```

Edit the SQL Statement, and click "Run SQL" to see the result.

Run SQL »

Result:

Number of Records: 4

city_name	population
Kolkata	300000
Pune	70000
Mumbai	900000
Chennai	30000

Your Database:

Tablename	Records
Customers	0
Categories	8
Employees	10
OrderDetails	518
Orders	196
Products	77
Shippers	3
Suppliers	29
Customer	6
City	4
Shipment	3
Truck	2

Indexes:

Name of Index
sqlite_autoindex_Customer_1
sqlite_autoindex_City_1
sqlite_autoindex_Shipment_1
sqlite_autoindex_Truck_1

Restore Database

Truck Table:

SQL Statement:

```
Select * from Truck;
```

Edit the SQL Statement, and click "Run SQL" to see the result.

Run SQL »

Result:

Number of Records: 2

truck_no	driver_name
67	Salil
87	Jamil

The Try-SQL Editor
at w3schools.com

Your Database:

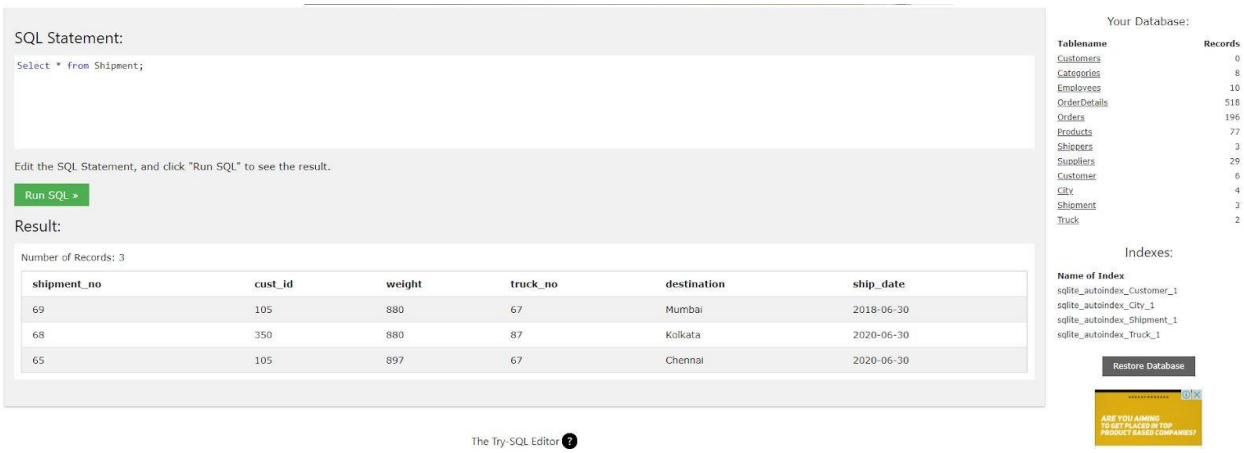
Tablename	Records
Customers	0
Categories	8
Employees	10
OrderDetails	518
Orders	196
Products	77
Shippers	3
Suppliers	29
Customer	6
City	4
Shipment	3
Truck	2

Indexes:

Name of Index
sqlite_autoindex_Customer_1
sqlite_autoindex_City_1
sqlite_autoindex_Shipment_1
sqlite_autoindex_Truck_1

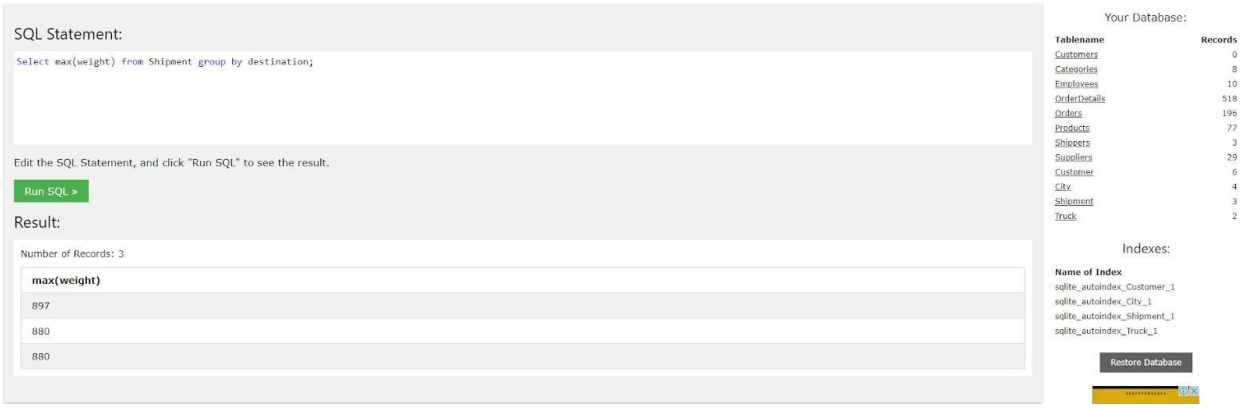
Restore Database

Shipment Table:

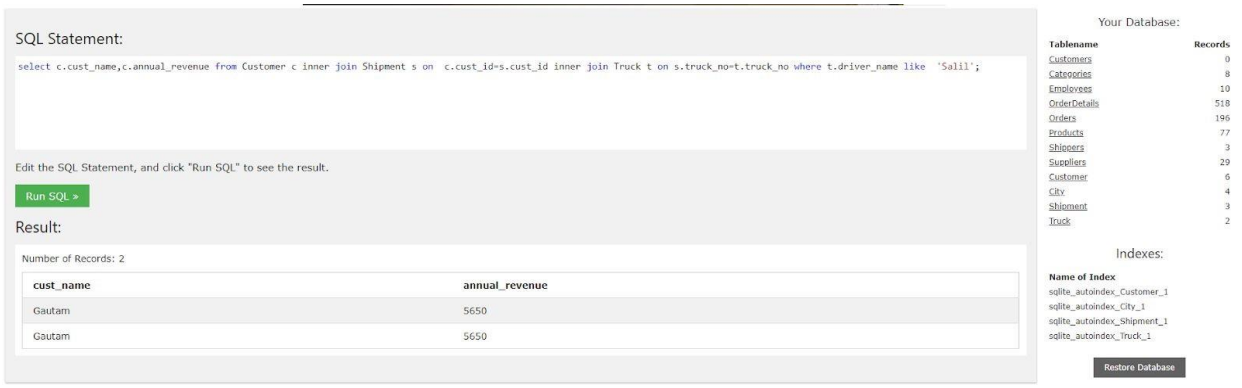


Queries:

1. Select max(weight) from Shipment group by destination;

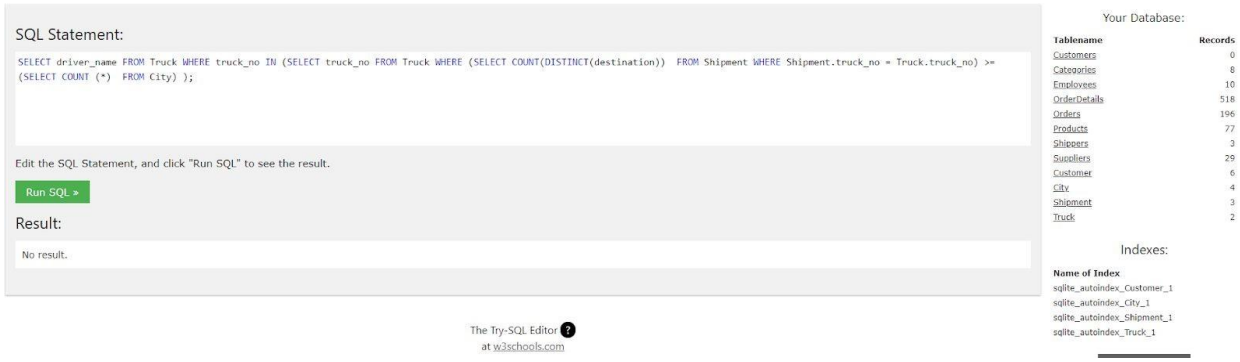


2. select c.cust_name,c.annual_revenue from Customer c inner join Shipment s on c.cust_id=s.cust_id inner join Truck t on s.truck_no=t.truck_no where t.driver_name like 'ARUN';



3. SELECT driver_name FROM Truck WHERE truck_no IN (SELECT truck_no FROM Truck WHERE (SELECT COUNT(DISTINCT(destination)) FROM Shipment WHERE Shipment.truck_no =

Truck.truck_no) >= (SELECT COUNT (*) FROM city));



4. Select min(s.weight) from Shipment s inner join City c on c.city_name=s.destination group by c.city_name having c.population>100000;