TAXIES DATABASE MANAGEMENT SYSTEM

INT-306 Database Management System

Submitted by

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1. INTRODUCTION

A database management system (DBMS) refers to the technology for creating and managing

databases. Basically, a DBMS is a software tool to organize (create, retrieve, update, and manage) data in a database. The main aim of a DBMS is to supply a way to store up and retrieve database information that is both convenient and efficient.

This project is about creating a database about taxies management system. Taxies management system allow user to check whether the taxies are available at their timing or not, what offer's are currently running. It also keep record of the passenger who take service , when he take, what offer given to him, how much amount he paid for the ride.

2. TECHNOLOGY LEARNT

The common components that are universal across all DBMS software, including:

- Storage engine.
- Query language.
- Query processor.
- Optimization engine.
- Metadata catalog.
- Log manager.
- Reporting and monitoring tools.
- Data utilities.

Learnt using SQL commandline and queries:

- Learned how to create tables and store data in them.
- Learnt how to select and sort the data according to our requirements.
- Learnt how to use query languages on the data to perform operations.
- Learnt how to use PLSQL to create functions and processes that can be operated through sql command line to be used on the data.

3. PROFILE OF THE PROBLEM

This project is about creating a database about taxies management System which keep record of the passenger who take ride , what amount he pay for ride , what offers are given to him for ride. It also keep record of taxi driver, taxies owner , cost of ride, timing on which he takes ride . This keep record of all these things like customer details, their ride , taxie owner , taxi driver details so that if they are satisfied with our service the take ride again.

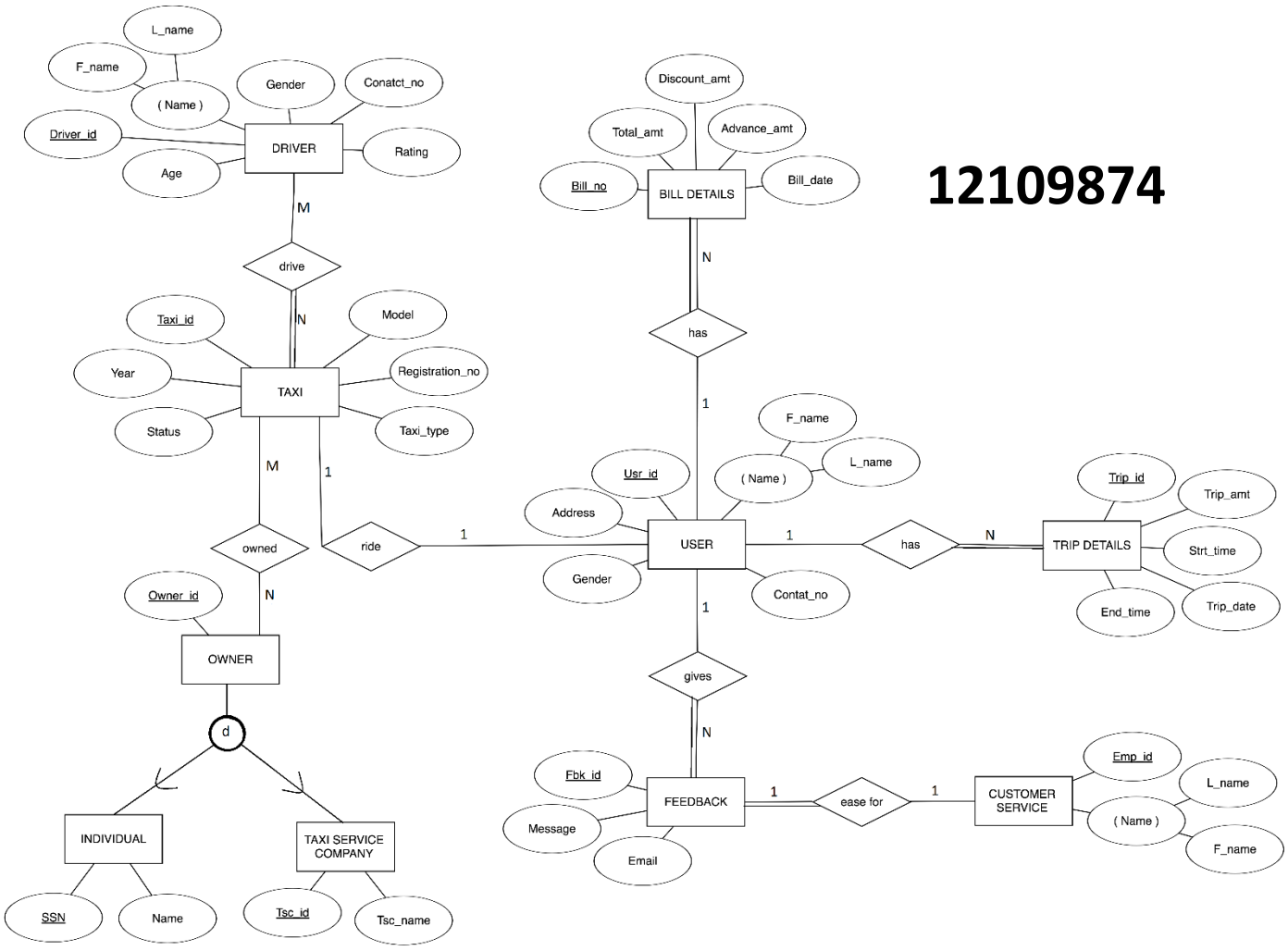
4. IMPLEMENTATION

The project is implemented using MySQL

MySQL, pronounced either "MySQL" or "My Sequel," is an open-source relational database management system. It is based on the structure query language (SQL), which is usedfor adding, removing, and modifying information in the database. Standard SQL commands, such as ADD, DROP, INSERT, and UPDATE can be used with MySQL.

5. ER Diagram:

Blood Bank Management System DATABASE E-R DIAGRAM



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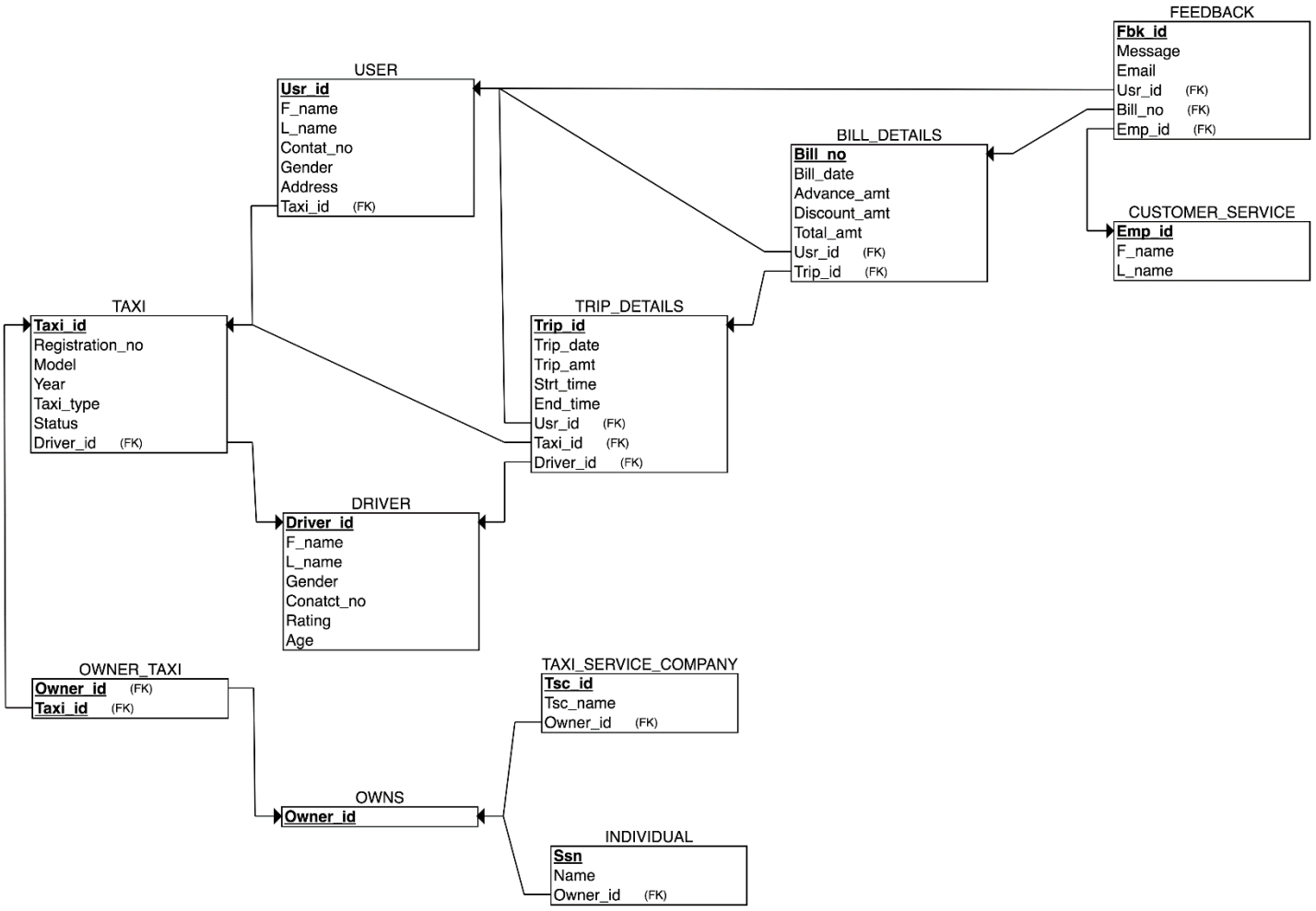
6.SCHEMA Diagram:



7. Database Design:

TABLE

1. TAXI
2. USER_TBL
3. DRIVER
4. TRIP_DETAILS
5. BILL_DETAILS
6. CUSTOMER_SERVICE
7. FEEDBACK
8. OWNS
9. OWNER_TAXI
10. INDIVIDUALS
11. TAXI_SERVICE_COMPANY

8.DDL(Data Definition Language)

Create Tables:- Create Command is used to Create tables in Database.

```
CREATE TABLE TAXI (
   Taxi_id integer NOT NULL,
   Registration_no VARCHAR(20),
   Taxi_Model VARCHAR(20),
   Taxi_Year DATE,
   Taxi_type VARCHAR(20),
   Status VARCHAR(20),
   Driver_id integer,
   PRIMARY KEY (Taxi_id),
   UNIQUE (Registration_no)
);

CREATE TABLE  USER_TBL (
   Usr_id integer NOT NULL,
   F_name VARCHAR(20),
   L_name VARCHAR(20),
   Contat_no integer,
   Gender VARCHAR(10),
   Address VARCHAR(50),
   Taxi_id integer,
   PRIMARY KEY (Usr_id)
);

CREATE TABLE   DRIVER (
   Driver_id integer NOT NULL,
   F_name VARCHAR(10),
   L_name VARCHAR(20),
   Gender VARCHAR(10),
   Conatct_no VARCHAR(20),
   Rating integer,
   Age integer,
   PRIMARY KEY (Driver_id)
);

CREATE TABLE  TRIP_DETAILS (
   Trip_id integer NOT NULL,
```

```
   Trip_date DATE,
   Trip_amt decimal(10,2),
   Driver_id integer,
   Usr_id integer,
   Taxi_id integer,
   Strt_time TIMESTAMP,
   End_time TIMESTAMP,
   PRIMARY KEY (Trip_id)
);

CREATE TABLE BILL_DETAILS (
   Bill_no integer NOT NULL,
   Bill_date DATE,
   Advance_amt decimal(10,2),
   Discount_amt decimal(10,2),
   Total_amt decimal(10,2),
   Usr_id integer,
   Trip_id integer,
   PRIMARY KEY (Bill_no),
   UNIQUE (Trip_id)
);

CREATE TABLE  CUSTOMER_SERVICE (
   Emp_id integer NOT NULL,
   F_name VARCHAR(20),
   L_name VARCHAR(20),
   PRIMARY KEY (Emp_id)
);

CREATE TABLE  FEEDBACK (
   Fbk_id integer NOT NULL,
   Message VARCHAR(140),
   Email VARCHAR(50),
   Emp_id integer,
   Usr_id integer,
   Trip_id integer,
   PRIMARY KEY (Fbk_id),
   UNIQUE (Emp_id)
);

CREATE TABLE  OWNS (
```

```
   Owner_id integer NOT NULL,
   No_Cars  integer,
   PRIMARY KEY (Owner_id)
);

CREATE TABLE  OWNER_TAXI (
   Owner_id integer NOT NULL,
   Taxi_id integer,
   PRIMARY KEY (Owner_id, Taxi_id)
);

CREATE TABLE INDIVIDUAL (
   Ssn integer NOT NULL,
   Name VARCHAR(20),
   Owner_id integer,
   PRIMARY KEY (Ssn)
);

CREATE TABLE  TAXI_SERVICE_COMPANY (
   Tsc_id integer NOT NULL,
   Tsc_name VARCHAR(20),
   Owner_id integer,
   PRIMARY KEY (Tsc_id)
);
```

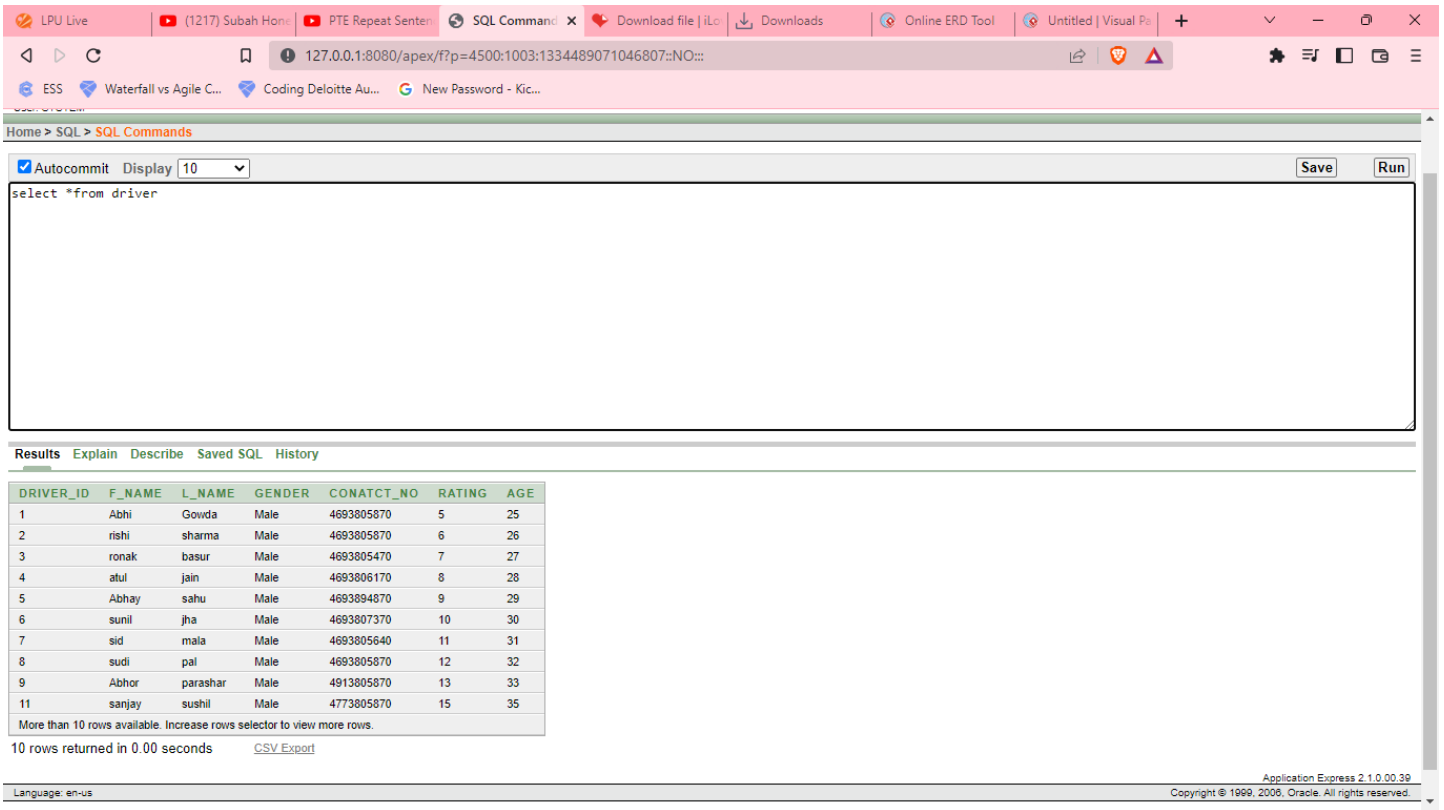
9.SQL STATEMENS FOR INSERT COMMANDS

```
INSERT INTO TAXI VALUES(1,'KA-15R-3367','BENZE
300',to_date('01/01/2017','mm/dd/yyyy'),'SUV','Availab
le',1)

INSERT INTO DRIVER
VALUES(1,'Abhi','Gowda','Male','4693805870',5,25);

INSERT INTO USER_TBL
VALUES(1,'USER1','LNAME','123456','Male','MCCAllum','1
');

INSERT INTO TRIP_DETAILS
VALUES(1,to_date('01/01/2017','mm/dd/yyyy'),123,1,1,1,
TO_TIMESTAMP('2017-01-01 06:14:00', 'YYYY-MM-DD
HH24:MI:SS'),TO_TIMESTAMP('2017-01-01 08:14:00',
'YYYY-MM-DD HH24:MI:SS'));

INSERT INTO BILL_DETAILS
VALUES(1,to_date('01/01/2017','mm/dd/yyyy'),1000.10,20
.11,null,1,1);

INSERT INTO CUSTOMER_SERVICE
VALUES(1,'prashuk','ajmera');

INSERT INTO CUSTOMER_SERVICE VALUES(1,'abhi','gowda');

INSERT INTO FEEDBACK
VALUES(1,'good','prashuk.ajmera@gmail.com',1,1,1);
```

```
INSERT INTO FEEDBACK VALUES(1,'not so
good','abhi@gmail.com',1,1,1);

INSERT INTO OWNS VALUES(1,1);

INSERT INTO OWNS VALUES(2,1);

INSERT INTO OWNER_TAXI (1,1);

INSERT INTO INDIVIDUAL VALUES(123,'abhi owner ind',1);

INSERT INTO TAXI_SERVICE_COMPANY VALUES (1,'abhi taxi
comp',2);
```

10.FOREIGN KEY CREATIONS

```
ALTER TABLE TAXI ADD CONSTRAINT fketadr FOREIGN KEY (Driver_id) REFERENCES DRIVER(Driver_id)
ON DELETE CASCADE;

ALTER TABLE USER_TBL ADD CONSTRAINT fkusta FOREIGN KEY (Taxi_id) REFERENCES TAXI(Taxi_id) ON
DELETE CASCADE;

ALTER TABLE TRIP_DETAILS ADD CONSTRAINT fktddr FOREIGN KEY (Driver_id) REFERENCES
DRIVER(Driver_id) ON DELETE CASCADE;

ALTER TABLE TRIP_DETAILS ADD CONSTRAINT fktdusr FOREIGN KEY (Usr_id) REFERENCES
USER_TBL(Usr_id) ON DELETE CASCADE;

ALTER TABLE TRIP_DETAILS ADD CONSTRAINT fktdtax FOREIGN KEY (Taxi_id) REFERENCES
TAXI(Taxi_id) ON DELETE CASCADE;

ALTER TABLE BILL_DETAILS ADD CONSTRAINT fkbdtd FOREIGN KEY (Trip_id) REFERENCES
TRIP_DETAILS(Trip_id) ON DELETE CASCADE;

ALTER TABLE BILL_DETAILS ADD CONSTRAINT fkbdusr FOREIGN KEY (Usr_id) REFERENCES
USER_TBL(Usr_id) ON DELETE CASCADE;

ALTER TABLE FEEDBACK ADD CONSTRAINT fkfbemp FOREIGN KEY (Emp_id) REFERENCES
CUSTOMER_SERVICE(Emp_id) ON DELETE CASCADE;

ALTER TABLE FEEDBACK ADD CONSTRAINT fkfbtd FOREIGN KEY (Trip_id) REFERENCES
TRIP_DETAILS(Trip_id) ON DELETE CASCADE;

ALTER TABLE FEEDBACK ADD CONSTRAINT fkfbusr FOREIGN KEY (Usr_id) REFERENCES USER_TBL(Usr_id)
ON DELETE CASCADE;

ALTER TABLE OWNER_TAXI ADD CONSTRAINT fkeowtax FOREIGN KEY (Taxi_id) REFERENCES TAXI(Taxi_id)
ON DELETE CASCADE;

ALTER TABLE OWNER_TAXI ADD CONSTRAINT fkeowowns FOREIGN KEY (Owner_id) REFERENCES
OWNS(Owner_id) ON DELETE CASCADE;

ALTER TABLE INDIVIDUAL ADD CONSTRAINT fkeinowns FOREIGN KEY (Owner_id) REFERENCES
OWNS(Owner_id) ON DELETE CASCADE;

ALTER TABLE TAXI_SERVICE_COMPANY ADD CONSTRAINT fketscowns FOREIGN KEY (Owner_id) REFERENCES
OWNS(Owner_id) ON DELETE CASCADE;
```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New Password - Kic...
Home > SQL > SQL Commands
Autocommit
Display 10
Save
Run
select *from driver
Results
Explain
Describe
Saved SQL
History
DRIVER_ID F_NAME L_NAME GENDER CONATCT_NO RATING AGE
1 Abhi Gowda Male 4693805870 5 25
2 rishi sharma Male 4693805870 6 26
3 ronak basur Male 4693805470 7 27
4 atul jain Male 4693806170 8 28
5 Abhay sahu Male 4693894870 9 29
6 sunil jha Male 4693807370 10 30
7 sid mala Male 4693805640 11 31
8 sudi pal Male 4693805870 12 32
9 Abhor parashar Male 4913805870 13 33
11 sanjay sushil Male 4773805870 15 35
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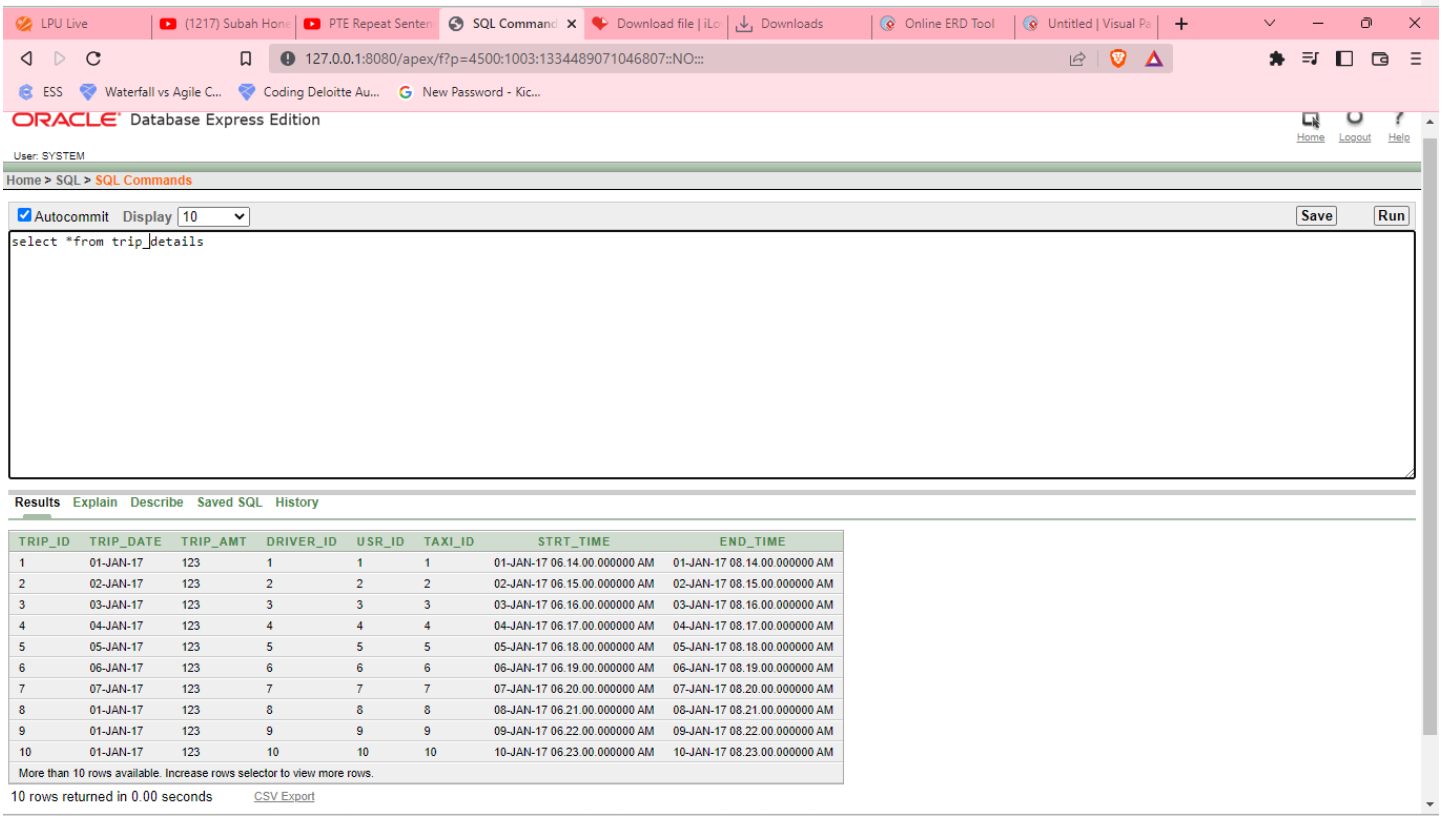
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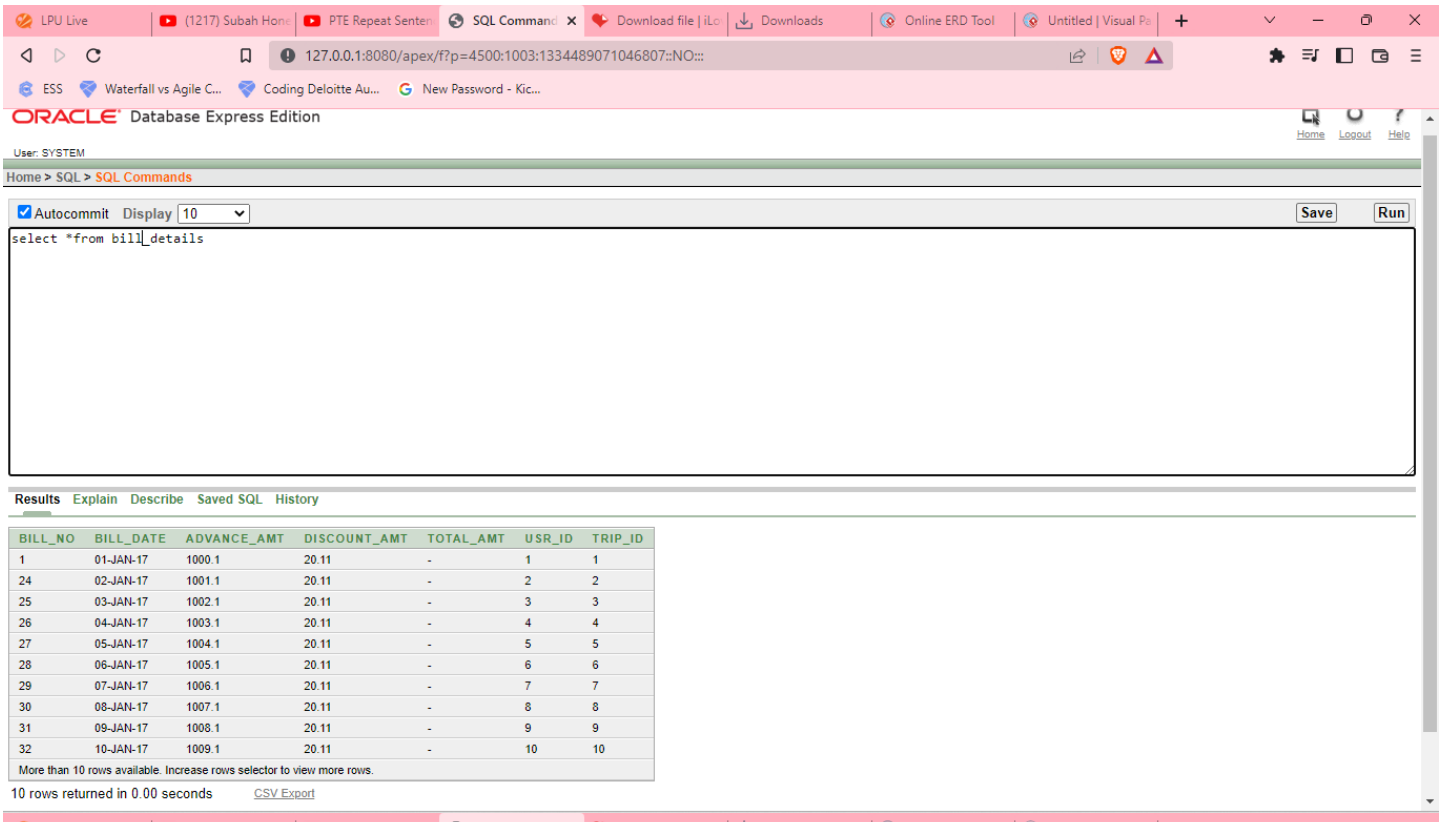
New Password - Kic...
ORACLE Database Express Edition
User: SYSTEM
Home
Logout
Help
Home > SQL > SQL Commands
Autocommit
Display 10
Save
Run
select *from trip_details
Results
Explain
Describe
Saved SQL
History
TRIP_ID TRIP_DATE TRIP_AMT DRIVER_ID USR_ID TAXI_ID STRT_TIME END_TIME
1 01-JAN-17 123 1 1 1 01-JAN-17 06.14.00.000000 AM 01-JAN-17 08.14.00.000000 AM
2 02-JAN-17 123 2 2 2 02-JAN-17 06.15.00.000000 AM 02-JAN-17 08.15.00.000000 AM
3 03-JAN-17 123 3 3 3 03-JAN-17 06.16.00.000000 AM 03-JAN-17 08.16.00.000000 AM
4 04-JAN-17 123 4 4 4 04-JAN-17 06.17.00.000000 AM 04-JAN-17 08.17.00.000000 AM
5 05-JAN-17 123 5 5 5 05-JAN-17 06.18.00.000000 AM 05-JAN-17 08.18.00.000000 AM
6 06-JAN-17 123 6 6 6 06-JAN-17 06.19.00.000000 AM 06-JAN-17 08.19.00.000000 AM
7 07-JAN-17 123 7 7 7 07-JAN-17 06.20.00.000000 AM 07-JAN-17 08.20.00.000000 AM
8 01-JAN-17 123 8 8 8 08-JAN-17 06.21.00.000000 AM 08-JAN-17 08.21.00.000000 AM
9 01-JAN-17 123 9 9 9 09-JAN-17 06.22.00.000000 AM 09-JAN-17 08.22.00.000000 AM
10 01-JAN-17 123 10 10 10 10-JAN-17 06.23.00.000000 AM 10-JAN-17 08.23.00.000000 AM
More than 10 rows available. Increase rows selector to view more rows.
10 rows returned in 0.00 seconds
CSV Export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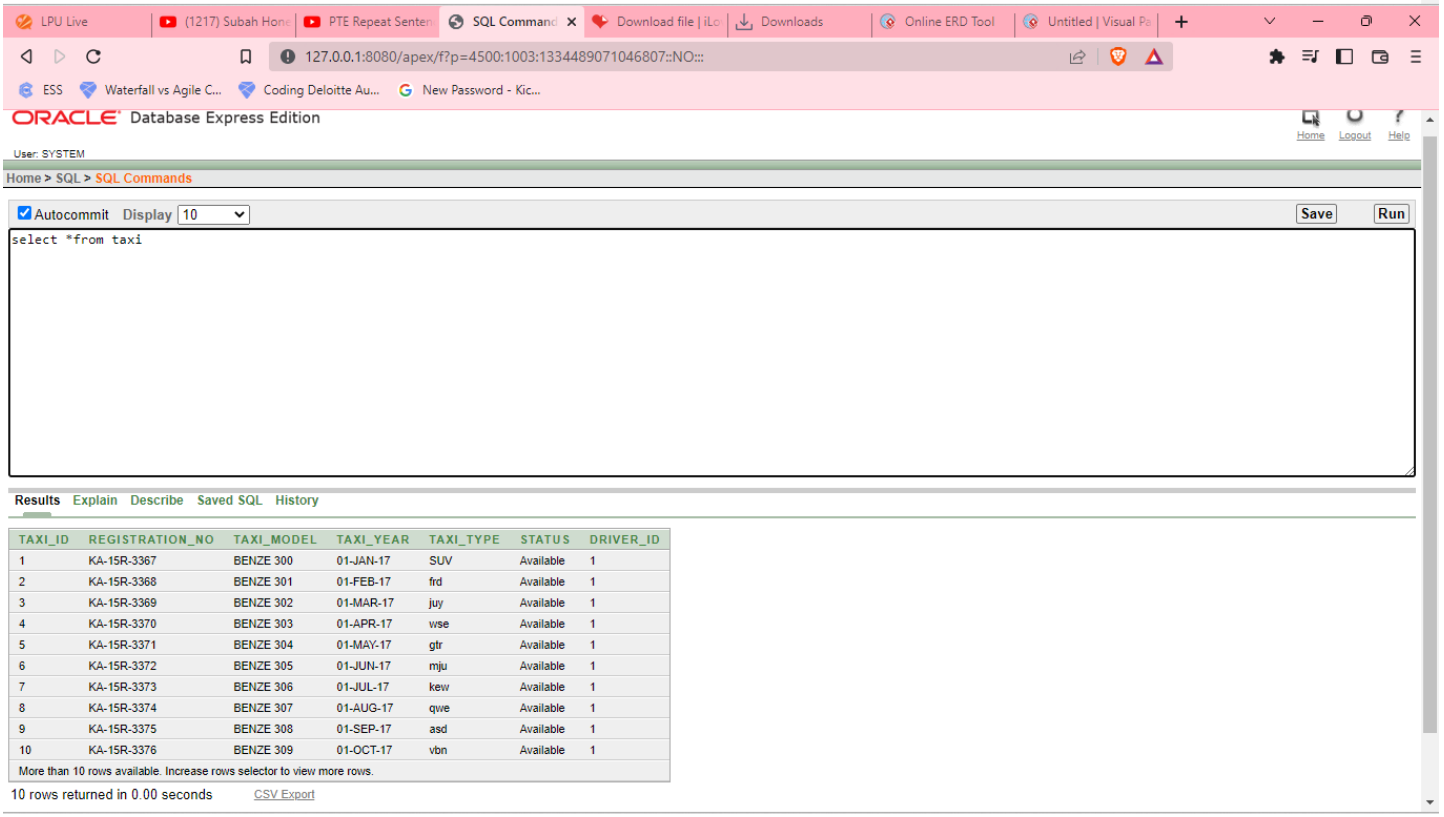
Coding Deloitte Au...
New Password - Kic...
ORACLE Database Express Edition
Home
Logout
Help
User: SYSTEM
Home > SQL > SQL Commands
Autocommit
Display 10
Save
Run
select *from bill_details
Results
Explain
Describe
Saved SQL
History
BILL_NO
BILL_DATE
ADVANCE_AMT
DISCOUNT_AMT
TOTAL_AMT
USR_ID
TRIP_ID
1 01-JAN-17 1000.1 20.11 - 1 1
24 02-JAN-17 1001.1 20.11 - 2 2
25 03-JAN-17 1002.1 20.11 - 3 3
26 04-JAN-17 1003.1 20.11 - 4 4
27 05-JAN-17 1004.1 20.11 - 5 5
28 06-JAN-17 1005.1 20.11 - 6 6
29 07-JAN-17 1006.1 20.11 - 7 7
30 08-JAN-17 1007.1 20.11 - 8 8
31 09-JAN-17 1008.1 20.11 - 9 9
32 10-JAN-17 1009.1 20.11 - 10 10
More than 10 rows available. Increase rows selector to view more rows.
10 rows returned in 0.00 seconds
CSV Export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Coding Deloitte Au...
New Password - Kic...
ORACLE Database Express Edition
Home
Logout
Help
User: SYSTEM
Home > SQL > SQL Commands
Autocommit
Display 10
Save
Run
select *from taxi
Results
Explain
Describe
Saved SQL
History
TAXI_ID
REGISTRATION_NO
TAXI_MODEL
TAXI_YEAR
TAXI_TYPE
STATUS
DRIVER_ID
1 KA-15R-3367 BENZE 300 01-JAN-17 SUV Available 1
2 KA-15R-3368 BENZE 301 01-FEB-17 frd Available 1
3 KA-15R-3369 BENZE 302 01-MAR-17 juy Available 1
4 KA-15R-3370 BENZE 303 01-APR-17 wse Available 1
5 KA-15R-3371 BENZE 304 01-MAY-17 gtr Available 1
6 KA-15R-3372 BENZE 305 01-JUN-17 mju Available 1
7 KA-15R-3373 BENZE 306 01-JUL-17 kew Available 1
8 KA-15R-3374 BENZE 307 01-AUG-17 qwe Available 1
9 KA-15R-3375 BENZE 308 01-SEP-17 asd Available 1
10 KA-15R-3376 BENZE 309 01-OCT-17 vbn Available 1
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CSV Export

11.NORMALIZATION OF RELATIONAL SCHEMA

- TAXI
  {Taxi_id ® Registration_no, Taxi_Model, Taxi_Year, Taxi_type, Status}

- USER
  {Usr_id ® F_name, L_name, Contat_no, Gender, Address, Taxi_id}

- DRIVER
  {Driver_id ® F_name, L_name, Gender, Conatct_no, Rating, Age}

- TRIP_DETAILS
  {Trip_id ® Trip_date, Trip_amt, Driver_id, Usr_id, Taxi_id, Strt_time, End_time}

- BILL_DETAILS
  {Bill_no ® Bill_date, Advance_amt, Discount_amt, Total_amt, Usr_id, Trip_id}

- CUSTOMER_SERVICE
  {Emp_id ® F_name, L_name}

- FEEDBACK
  {Fbk_id ® Message, Email, Emp_id, Usr_id, Trip_id}

- OWNER_TAXI
  {Owner_id ® Taxi_id}

- OWNS
  {Owner_id ® No_Cars}

- INDIVIDUAL
  {Ssn ® Name, Owner_id}

- TAXI_SERVICE_COMPANY
  {Tsc_id ® Tsc_name, Owner_id