# Easy Travels



# Project Overview, Group Members and Responsibilities

Easy Travels is a travel agency company and its primary services include booking services for its customers in Hotel, Airline, Bus Agencies, and Rental Car reservations. Our group which consist of team members: Tarun Giduturi, Gene Reyes, Earlvin Rivera and Chu Lin (Will) Tao planned and developed a database that will serve as part of the data repository for 'Easy Travels'.

From company selection, planning, creation and execution of the database, there were various steps performed and worked on to compile the project in its entirety. These various steps include: Company selection and design, ERD Diagram creation, Logical Schema creation, SQL DDL command table, instance and query code creation, DDL command input into our Oracle database and the final write-up of our business plan deliverable.

For the first few segments, our four-person group met and collaborated in person to discuss and create our company selection and design, ERD Diagram along with its relations and cardinalities. For the latter segments, the group utilized Google Drive online services to divide the work amongst the group, yet still have the convenience of collaborating in real time creating our portions of the Logical Schema, SQL DDL commands for table creations, insert instances and putting together our business report deliverable.

# Project Objective

The projects objective is to develop a database that will serve as a part of the data repository for our company 'Easy Travels'. This database tracks the reservations created by our customers looking to book travel services through our list of clients, which consist of vacation transportation services as well as lodging. In addition, for company purposes, it also tracks their employee's activity in regards to company business.

# **Tables**

As shown in our ERD Diagram, the tables that make up Easy Travels database include the following: Customer, Employee, Airline, Bus, Hotel, Rental Car and Reservations.

- **Customer:** This table contains data about the customers, who make reservations using any one of our clients that offer transportation services.
- **Employee:** This table contains data about the employees that work for our company, their respective roles, salary and start date.
- Airline: This table contains data about our clients that provide airline transportation services including contact information and account details.
- **Bus:** This table contains data about our clients that provide bus transportation services including contact information and account details.
- Hotel: This table contains data about our clients that provide hotel lodging services including contact information and account details.
- Rental Car: This table contains data about our clients that provide rental car services including contact information and account details.
- Reservations: The central table of this system as it will at any given point in time always
  include foreign keys from the other tables in the system. Primarily, the reservations table
  will store all the necessary information to distinguish each and every reservation made
  within our Easy Travels business system.

## Queries

The queries include the following broken up by respective category:

## Data Definition Language (DDL) commands:

**Create Statements Queries**: These queries include statements that would create tables and it's columns in the database and we also specify the data types, field lengths, null values, constraints like primary keys, foreign keys with relationships, unique and default values. We have created 7 different create statements queries for creating 7 tables which include Reservations, Airline, Bus, Hotel, Rental Car, Customer, and Employee.

**Drop Statement Query**: This query drops the Employee table completely along with it's data and it's structure.

**Alter Statement Query**: This query alters or changes (add or drop) the constraints and columns of Employee table.

## Data Manipulation Language (DML) Commands:

**Insert Statements queries**: These queries include statements that insert the collected data into the 7 tables in the database so that the information is available for every employee for querying and interpret the results.

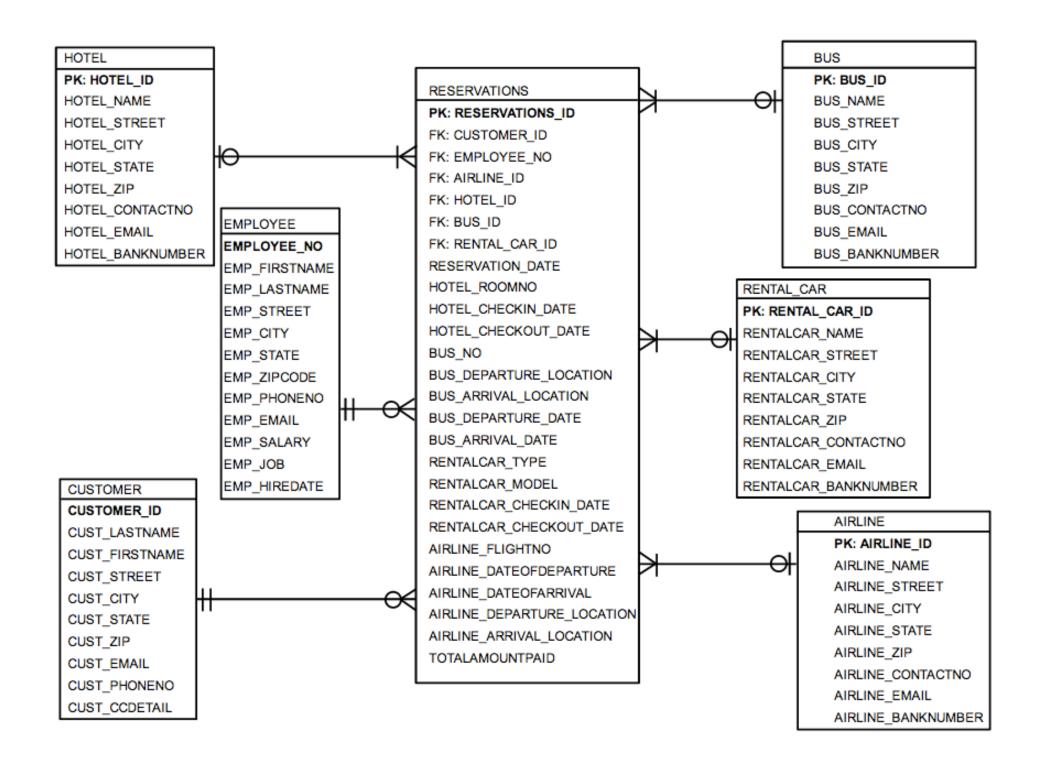
**Select Statements queries**: These queries include statements that query the database and displays results that represent important information that is useful for the organization. We have written select statements that use join clauses, nested queries, where clause, group by clause, having clause, like operator, 'AND' and 'OR' operators, and order by clause.

**Update Statement Query**: This query erases the previous records of the Rental Car state and City data and updates it with the new data in the Rental Car data table in the database.

**Delete Statement Query**: This query statement deletes the data column from the bus table that is located in 'VA'.

## **Transaction Control (TCL) Commands:**

**Commit Statement**: This command saves all the data and the changes made to the database and store it permanently.



#### CUSTOMER CUSTOMER\_ID CUST\_LASTNAME CUST\_FIRSTNAME CUST\_STREET CUST\_CITY CUST\_STATE CUST\_ZIP CUST\_EMAIL CUST\_PHONENO CUST\_CCCETAIL **EMPLOYEE** EMPLOYEE NO EMP\_FIRSTNAME EMP\_LASTNAME EMP\_STREET EMP CITY EMP\_STATE EMP\_ZIPCODE EMP EMAIL EMP\_PHONENO EMP\_SALARY EMP\_JOB EMP\_HIREDATE RESERVATIONS RESERVATIONS\_ID FK: CUSTOMER\_ID FK: EMPLOYEE NO FK: AIRLINE\_ID FK: HOTEL\_ID FK: BUS\_ID FK: RENTAL CAR ID RESERVATION\_DATE HOTEL ROOMNO HOTEL CHECKIN DATE HOTEL\_CHECKOUT\_DATE BUS DEPARTURE LOCATION BUS ARRIVAL LOCATION BUS DEPARTURE DATE BUS\_ARRIVAL\_DATE RENTALCAR TYPE RENTALCAR\_MODEL BUS\_NO ARLINE FLIGHTNO AIRLINE DATEOFDEPARTURE RENTALCAR CHECKIN DATE RENTALCAR\_CHECKOUT\_DATE AIRLINE DATEOFARRIVAL AIRLINE\_DEPARTURE\_LOCATION AIRLINE\_ARRIVAL\_LOCATION TOTALAMOUNTPAID AIRLINE ARLINE ID AIRLINE NAME AIRLINE STREET ARLINE CITY AIRLINE STATE ARLINE ZIP AIRLINE CONTACTNO AIRLINE BANKNUMBER BUS BUS ID BUS\_NAME BUS STREET BUS\_CITY BUS\_STATE BUS ZIP BUS CONTACTNO BUS BANKNUMBER RENTAL CAR RENTALCAR CONTACTNO RENTALCAR\_NAME RENTALCAR STREET RENTALCAR CITY RENTALCAR\_STATE RENTALCAR ZIP RENTALCAR BANKNUMBER

#### Create Statements:

```
CREATE TABLE CUSTOMER
                                     NOT NULL,
    (CUSTOMER_ID
                    VARCHAR2(5)
    CUST_LASTNAME
                    VARCHAR2(25)
                                     NOT NULL,
    CUST_FIRSTNAME
                    VARCHAR2(25)
                                     NOT NULL,
    CUST_STREET
                    VARCHAR2(30),
    CUST_CITY
                    VARCHAR2(20),
    CUST_STATE
                    CHAR(2),
    CUST_ZIP
                    VARCHAR2(10),
    CUST_EMAIL
                    VARCHAR2(50)
                                     NOT NULL
        CONSTRAINT
                         CUST_EMAIL_UK
                                             UNIQUE,
                                     NOT NULL
    CUST_PHONENO
                    NUMBER(15)
        CONSTRAINT
                         CUST_PHONENO_UK
                                             UNIQUE,
                                     NOT NULL
    CUST_CCDETAIL
                    NUMBER(25)
        CONSTRAINT
                         CUST_CCDETAIL_UK
                                             UNIQUE,
CONSTRAINT CUSTOMER_PK PRIMARY KEY (CUSTOMER_ID));
CREATE TABLE BUS
    (BUS_ID
                    VARCHAR2(5)
                                     NOT NULL,
                                     NOT NULL,
    BUS_NAME
                    VARCHAR2(20)
    BUS_STREET
                    VARCHAR2(30),
    BUS_CITY
                    VARCHAR2(15),
    BUS_STATE
                    CHAR(2),
    BUS_ZIP
                    VARCHAR2(10),
    BUS_CONTACTNO
                    NUMBER(15)
                                     NOT NULL
                         BUS_CONTACTNO_UK
        CONSTRAINT
                                             UNIQUE,
    BUS EMAIL
                    VARCHAR2(50)
                                     NOT NULL
        CONSTRAINT
                         BUS_EMAIL_UK
                                             UNIQUE,
                                     NOT NULL
    BUS_BANKNUMBER
                    NUMBER(10)
                         BUS_BANKNUMBER_UK
                                             UNIQUE,
        CONSTRAINT
CONSTRAINT BUS_PK PRIMARY KEY (BUS_ID));
CREATE TABLE RENTAL_CAR
    (RENTALCAR_ID
                          VARCHAR2(5)
                                          NOT NULL,
    RENTALCAR_NAME
                          VARCHAR2(20)
                                          NOT NULL,
    RENTALCAR_STREET
                          VARCHAR2(30),
    RENTALCAR_CITY
                          VARCHAR2(15),
    RENTALCAR_STATE
                          CHAR(2),
    RENTALCAR_ZIP
                          VARCHAR2(10),
    RENTALCAR_CONTACTNO
                         NUMBER(15)
                                          NOT NULL
        CONSTRAINT
                             RENTALCAR_CONTACTNO_UK UNIQUE,
    RENTALCAR_EMAIL
                          VARCHAR2(50)
                                          NOT NULL
                             RENTALCAR_EMAIL_UK
        CONSTRAINT
                                                      UNIQUE,
    RENTALCAR_BANKNUMBER NUMBER(10)
                                                NOT NULL
        CONSTRAINT
                             RENTALCAR_BANKNUMBER_UK UNIQUE,
CONSTRAINT RENTALCAR_PK PRIMARY KEY (RENTALCAR_ID));
CREATE TABLE AIRLINE
                                         NOT NULL,
    (AIRLINE_ID
                         VARCHAR2(5)
    AIRLINE_NAME
                         VARCHAR2(20)
                                         NOT NULL,
    AIRLINE_STREET
                         VARCHAR2(30),
    AIRLINE_CITY
                         VARCHAR2(15),
    AIRLINE_STATE
                         CHAR(2),
```

```
AIRLINE_ZIP
                         VARCHAR2(10),
    AIRLINE_CONTACTNO
                         NUMBER(15)
                                         NOT NULL
        CONSTRAINT
                             AIRLINE CONTACTNO UK
                                                     UNIQUE,
    AIRLINE_EMAIL
                         VARCHAR2(50)
                                         NOT NULL
                                                     UNIQUE,
        CONSTRAINT
                             AIRLINE_EMAIL_UK
    AIRLINE_BANKNUMBER NUMBER(10)
                                         NOT NULL
        CONSTRAINT
                             AIRLINE_BANKNUMBER_UK
                                                     UNIQUE,
CONSTRAINT AIRLINE_PK PRIMARY KEY (AIRLINE_ID));
CREATE TABLE HOTEL
    (HOTEL_ID
                         VARCHAR2(5)
                                         NOT NULL,
    HOTEL_NAME
                         VARCHAR2(20)
                                         NOT NULL,
    HOTEL_STREET
                         VARCHAR2(30),
    HOTEL_CITY
                         VARCHAR2(15),
    HOTEL_STATE
                         CHAR(2),
    HOTEL_ZIP
                         VARCHAR2(10),
                                         NOT NULL
    HOTEL_CONTACTNO
                         NUMBER(15)
                         HOTEL_CONTACTNO_UK UNIQUE,
        CONSTRAINT
    HOTEL_EMAIL
                         VARCHAR2(50)
                                         NOT NULL
        CONSTRAINT
                         HOTEL_EMAIL_UK
                                             UNIQUE,
    HOTEL_BANKNUMBER
                                         NOT NULL
                         NUMBER(10)
        CONSTRAINT
                         HOTEL_BANKNUMBER_UK UNIQUE,
CONSTRAINT HOTEL_PK PRIMARY KEY (HOTEL_ID));
CREATE TABLE EMPLOYEE
                                     NOT NULL,
    (EMPLOYEE_NO
                    VARCHAR2(5)
                    VARCHAR2(25)
    EMP_FIRSTNAME
                                     NOT NULL,
    EMP_LASTNAME
                                     NOT NULL,
                    VARCHAR2(25)
    EMP_STREET
                    VARCHAR2(30),
    EMP_CITY
                    VARCHAR2(20),
    EMP_STATE
                    CHAR(2),
    EMP_ZIPCODE
                    VARCHAR2(10),
    EMP_PHONENO
                    NUMBER(15)
                                     NOT NULL
                         EMP_PHONENO_UK UNIQUE,
        CONSTRAINT
    EMP_EMAIL
                    VARCHAR2(50)
                                     NOT NULL
        CONSTRAINT
                         EMP_EMAIL_UK
                                         UNIQUE,
                                         DEFAULT(0),
    EMP_SALARY
                    NUMBER(10)
                                     NOT NULL,
    EMP_JOB
                    VARCHAR2(25)
    EMP_HIREDATE
                    DATE
                            DEFAULT
                                     SYSDATE,
CONSTRAINT EMPLOYEE_PK PRIMARY KEY(EMPLOYEE_NO));
CREATE TABLE RESERVATIONS
                                                 NOT NULL,
    (RESERVATION_ID
                                 VARCHAR2(10)
    RESERVATION_DATE
                                 DATE DEFAULT
                                                 SYSDATE,
    CUSTOMER_ID
                                 VARCHAR2(5),
    EMPLOYEE_NO
                                 VARCHAR2(5),
    AIRLINE_ID
                                 VARCHAR2(5),
                                 VARCHAR2(5),
    HOTEL_ID
    BUS_ID
                                 VARCHAR2(5),
    RENTALCAR_ID
                                 VARCHAR2(5),
    HOTEL_ROOMNO
                                 NUMBER(5),
    HOTEL_CHECKIN_DATE
                                 TIMESTAMP,
                                 TIMESTAMP,
    HOTEL_CHECKOUT_DATE
    BUS_NO
                                 NUMBER(7),
```

```
BUS_DEPARTURE_LOCATION
                                VARCHAR2(20),
    BUS_ARRIVAL_LOCATION
                                VARCHAR2(20),
    BUS_DEPARTURE_DATE
                                TIMESTAMP,
    BUS_ARRIVAL_DATE
                                TIMESTAMP,
    RENTALCAR_TYPE
                                VARCHAR2(14),
    RENTALCAR_MODEL
                                VARCHAR2(18),
    RENTALCAR_CHECKIN_DATE
                                TIMESTAMP,
    RENTALCAR_CHECKOUT_DATE
                                TIMESTAMP,
    AIRLINE_FLIGHTNO
                                VARCHAR2(15),
                                TIMESTAMP,
    AIRLINE_DATEOFDEPARTURE
    AIRLINE_DATEOFARRIVAL
                                TIMESTAMP,
    AIRLINE_DEPARTURE_LOCATION
                                VARCHAR2(30),
    AIRLINE_ARRIVAL_LOCATION
                                VARCHAR2(30),
    TOTALAMOUNTPAID
                                NUMBER(9)
                                                 NOT NULL,
        CONSTRAINT CUSTOMERS_FK FOREIGN KEY (CUSTOMER_ID) REFERENCES CUSTOMER
(CUSTOMER_ID),
        CONSTRAINT EMPLOYEE_FK FOREIGN KEY (EMPLOYEE_NO) REFERENCES EMPLOYEE
(EMPLOYEE_NO),
        CONSTRAINT AIRLINE_FK FOREIGN KEY (AIRLINE_ID) REFERENCES AIRLINE (AIRLINE_ID),
        CONSTRAINT HOTEL_FK FOREIGN KEY (HOTEL_ID) REFERENCES HOTEL (HOTEL_ID),
        CONSTRAINT BUS_FK FOREIGN KEY (BUS_ID) REFERENCES BUS (BUS_ID),
        CONSTRAINT RENTALCAR_FK FOREIGN KEY (RENTALCAR_ID) REFERENCES RENTAL_CAR
(RENTALCAR_ID),
CONSTRAINT RESERVATION_PK PRIMARY KEY(RESERVATION_ID));
ALTER TABLE EMPLOYEE DROP COLUMN EMP_STREET;
ALTER TABLE EMPLOYEE
    ADD EMP_STREET VARCHAR2(30);
DROP TABLE EMPLOYEE CASCADE CONSTRAINTS;
CREATE TABLE EMPLOYEE
                                    NOT NULL,
    (EMPLOYEE_NO
                    VARCHAR2(5)
    EMP_FIRSTNAME
                    VARCHAR2(25)
                                    NOT NULL,
    EMP_LASTNAME
                    VARCHAR2(25)
                                    NOT NULL,
    EMP_STREET
                    VARCHAR2(30),
    EMP_CITY
                    VARCHAR2(20),
    EMP_STATE
                    CHAR(2),
    EMP_ZIPCODE
                    VARCHAR2(10),
    EMP_PHONENO
                    NUMBER(15)
                                    NOT NULL
        CONSTRAINT EMP_PHONENO_UK
                                        UNIQUE,
    EMP_EMAIL
                    VARCHAR2(50)
                                    NOT NULL
        CONSTRAINT EMP_EMAIL_UK
                                    UNIQUE,
    EMP_SALARY
                    NUMBER(10)
                                    DEFAULT(0),
    EMP_JOB
                    VARCHAR2(25)
                                    NOT NULL,
    EMP_HIREDATE
                    DATE DEFAULT
                                    SYSDATE,
CONSTRAINT EMPLOYEE_PK PRIMARY KEY(EMPLOYEE_NO));
```

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INSERT INTO BUS
VALUES('B_601', 'GREYHOUND', '133 BUS ROAD', 'SAN FRANCISCO', 'CA',
'94102-6372', '4156940590', 'greyhound@ymail.com', '293038491');
INSERT INTO BUS
               'FOXHOUND', '2 C STREET', 'COLMA', 'CA', '94014-9822',
VALUES('B_602',
'6509896069', 'foxhound@gmail.com', '928392012');
INSERT INTO BUS
VALUES('B_603', 'MUNI', '300 SUTTER ST.', 'SAN FRANCISCO', 'CA',
'84783-9724',
'9389283988',
               'muni@sfma.org', '992001939');
INSERT INTO BUS
                'SAMTRANS', '265 YOBORT DR.', 'SAN JOSE', '9384535890', 'samtrans@sma.com', '92263109');
VALUES('B_604',
                                                   'SAN JOSE', 'CA',
'84708-9830',
INSERT INTO BUS
                'MOUNTAIN', '291 BEACH AVE', 'PACIFICA', 'CA',
VALUES('B_605',
                '8002930291', 'mountain@gmail.com', '948593019');
'94044-8362',
INSERT INTO BUS
                'GOTIM', '219 REALM STREET', 'MIDDLE EARTH', 'VA', '8889391384', 'gotim@ymail.com', '938475919');
VALUES('B_606',
'93013-7223',
INSERT INTO BUS
                                                    'KINGS LANDING', 'WA',
VALUES('B_607', 'BUSEY', '31 IRON THRONE STREET',
                                                  '391029384');
'82910-9483', '7800938192', 'busey@bmail.com',
INSERT INTO EMPLOYEE
VALUES('E_101', 'COLLIN', 'KAPERNICK', '4534 EXPOSITION DR', 'SAN JOSE',
       'CA', '95101', '9458361111', 'N01QB@YAHOO.COM', '40837', 'CLIENT
MANAGER', DEFAULT);
INSERT INTO EMPLOYEE
VALUES('E_102', 'RIM', 'GLADYS', '322 New Horizon Blvd', 'Milwaukee', 'WI',
'53207-3720', '4146619598', 'gladys.rim@rim.org', '50256', 'CLIENT RELATIONS',
'25-JUN-2013');
INSERT INTO EMPLOYEE
VALUES('E_103', 'WHOBREY', 'YUKI', '1 State Route 27', 'Taylor', 'MI', '48180-3262', '3132887937', 'yuki_whobrey@aol.com', '47122', 'CEO', '06-
SEP-2010');
INSERT INTO EMPLOYEE
VALUES('E_104', 'FLOSI', 'FLETCHER', '394 Manchester Blvd', 'Rockford',
'IL', '61109',
                 '8158282147', 'fletcher.flosi@yahoo.com', '45213',
'ACCOUNTANT', '17-APR-2011');
INSERT INTO EMPLOYEE
VALUES('E_105', 'Nicka', 'Bette', '6 S 33rd St', 'Aston', 'PA', '19014',
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Insert Statements:

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'6105453615', 'bette_nicka@cox.net', '84213', 'DATABASE SPECIALIST', DEFAULT);
INSERT INTO EMPLOYEE
VALUES('E_106', 'Inouye', 'Veronika', '6 Greenleaf Ave', 'San Jose', 'CA',
'95111-0029', '4085401785', 'vinouye@aol.com', '100322', 'CEO', '29-
MAY-2002');
INSERT INTO EMPLOYEE
VALUES('E_107', 'Kolmetz', 'Willard', '618 W Yakima Ave', 'Irving', 'TX', '75062-4682', '9723039197', 'willard@hotmail.com', '86879', 'BUSINESS
ANALYST', DEFAULT);
INSERT INTO CUSTOMER
VALUES('C_1', 'AITO', 'THOMAS', '400 JOHN BOULEVARD', 'DALY
CITY', 'CA', '94014-7367', 'AIT_400@GMAIL.COM', '6509868958', '8393019301938390'
);
INSERT INTO CUSTOMER
VALUES('C_2', 'BURGERSON', 'JENNIFER', '6649 N BLUE GUM ST', 'NEW ORLEANS', 'LA', '70116-7377', 'JBUTT@GMAIL.COM', '5046218927', '211321584
ORLEANS',
6846910'):
INSERT INTO CUSTOMER
VALUES('C_3', 'CHOW', 'MEI', '4 B BLUE RIDGE
BOULEVARD', 'BRIGHTON', 'MI', '48116-0391', 'JOSEPHINE@DARAKJY.ORG', '8
102929388', '2116516169846510');
102929388',
INSERT INTO CUSTOMER
VALUES('C_4', 'CRUZ', 'JOSE', '8 W CERRITTOS AVE
#54', 'BRIDGEPORT', 'NJ', '88014', 'ART@VENERE.ORG', '8566368749', '6
724516161698410');
INSERT INTO CUSTOMER
VALUES('C_5', 'MILLER', 'JASON', '639 MAIN
ST', 'ANCHORAGE', 'AK', '99501-2618', 'LAPOP@GMAIL.COM', '9073854412', '8
321151654161610');
INSERT INTO CUSTOMER
VALUES('C_6', 'CURRY', 'STEPHEN', '34 CENTER
ST', 'HAMILTON', 'OH', '45011-2815', 'DONETTE@POP.COM', '5135701893', '9
614556151616510');
INSERT INTO CUSTOMER
VALUES('C_7', 'BUTT', 'JAMES', '3 MCAULEY
DR', 'ASHLAND', '0H', '44805-3619',
'SIMONA@OHMAIL.COM', '4195032484', '4146451651650650');
INSERT INTO AIRLINE
VALUES('A_101', 'HAWAIIAN', '565 GLOCUSTER
RD', 'HONOLULU', 'HI', '98628-1201', '8087381010', 'hawaiian.airline@gmail.co
       '177827392');
m',
```

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INSERT INTO AIRLINE
VALUES('A_102', 'DELTA', '1872 CRAWITTER WAY', 'ATLANTA', 'GA', '30307-7362', '4049222098', 'delta@mail.yahoo.com', '3
05143834');
INSERT INTO AIRLINE
                             '801 RODEO
VALUES('A_103', 'SOUTHWEST',
BLVD', 'DALLAS', 'TX', '75201-8363', '9726578463', 'southwest@gmail.com', '9
25483464');
INSERT INTO AIRLINE
VALUES('A_104', 'JETBLUE', '1001 MANHATTAN RD', 'ISLAND
CITY', 'NY', '11101-1427', '6310723635', 'jetblue@yahoo.com', '951448258');
INSERT INTO AIRLINE
VALUES('A_105', 'VIRGIN US', '211 KARTWAY
ST', 'BURLINGAME', 'CA', '94011-9473', '6508267451', 'virginus@aol.com', '5
18354833');
INSERT INTO AIRLINE
VALUES('A_106', 'SPIRIT', '707 UPLINE BLVD', 'MIRAMAR', 'FL', '32899-7352', '4071378374', 'spirit@ymail.com', '665442636');
INSERT INTO AIRLINE
VALUES('A_107', 'MAGIC SKYWAY', '8998 TOPLINE WAY', 'SEATTLE',
        'WA', '98101-8472', '2068368221', 'magic.shyway@gmail.com', '223354731
');
INSERT INTO HOTEL
VALUES('H_101', 'AMBASSADOR', '60 LINCOLN WAY',
                                                      'SAN
FRANCISCO', 'CA', '93710-4124', '4152813819', 'ambassador@aol.com', '417847307
');
INSERT INTO HOTEL
VALUES('H_102', 'WESTIN ST FRANCIS', '789 AIRLINE BLVD', 'SAN FRANCISCO', 'CA', '94132-4131', '4157656575', 'westinfranc@hotmail.com',
63466693');
INSERT INTO HOTEL
VALUES('H_103', 'CASA MARINA', '8913 SUNRISE
       'ORLANDO', 'FL', '32801-1154', '4079276352', 'casamarina@hotmail.com',
       '980666212');
INSERT INTO HOTEL
VALUES('H_104', 'FLAMINGO', '211 BEACH
AVE', 'MIAMI', 'FL', '32818-3722', '3051322422', 'flamingo@gmail.com', '8
78666684');
INSERT INTO HOTEL
VALUES('H_105', 'ALA MOANA', '9912 TURTLE COVE
LANE', 'HONOLULU', 'HI', '96803-9972', '8085356498', 'alamoana@gmail.com', '5
28365381');
```

```
INSERT INTO HOTEL
VALUES('H_106', 'TURTLE BAY', '871 BEACH
                                '96801-0036', '8088273739',
ST', 'HONOLULU', 'HI',
'turtle.bay@mail.yahoo.com',
                              '876526180');
INSERT INTO HOTEL
VALUES('H_107', 'TRUMP', '972 TULLEY RD', 'MANHATTAN', 'NY', '10002-5562', '2127361625', 'trump@gmail.com', '4
14822510');
INSERT INTO RENTAL_CAR
VALUES('R_101', 'AVIS', '30 CAMPUS DRIVE', 'DALY
CITY', 'CA', '94014-8362', '6509876578', 'HQ@AVIS.COM', '973864767');
INSERT INTO RENTAL_CAR
VALUES('R_102', 'HERTZ', '40 SUNSHINE ROAD', 'ORLANDO', 'FL', '94066-9383', '6509870987', 'HQ@HERTZ.COM', '926478563
');
INSERT INTO RENTAL_CAR
VALUES('R_103', 'ENTERPRISE', '1029 FUNNY STREET',
                                                       'SAN
FRANCISCO',
               'CA', '94102-1321', '4156768925', 'HQ@ENTERPRISE.COM', '837645167
');
INSERT INTO RENTAL_CAR
VALUES('R_104', 'DOLLAR', '401 CITY
STREET', 'BROOKYLN', 'NY', '94402-4132', '6508763521', 'HQ@DOLLAR.COM',
        '983716356');
INSERT INTO RENTAL_CAR
VALUES('R_105', 'NATIONAL', '139 ANYWHERE STREET'.
FRANCISCO', 'CA', '94102-6251', '4156749302',
                                                        'HQ@NATIONAL.COM', '263516278
');
INSERT INTO RENTAL_CAR
VALUES('R_106', 'THRIFTY', '736 HAPPY STREET', 'AUSTIN', 'TX', '94015-6253', '6508372681', 'HQ@THRIFTY.COM',
       '836451739');
INSERT INTO RENTAL_CAR
               'BUDGET', '410 B
'ATLANTA', 'GA', '94014-6522', '6509873521', 'HQ@BUDGET.COM',
VALUES('R_107', 'BUDGET',
       '274542678');
INSERT INTO RESERVATIONS(RESERVATION_ID, RESERVATION_DATE, CUSTOMER_ID, EMPLOYEE_NO,
AIRLINE_ID, AIRLINE_FLIGHTNO, AIRLINE_DATEOFDEPARTURE, AIRLINE_DATEOFARRIVAL,
AIRLINE_DEPARTURE_LOCATION, AIRLINE_ARRIVAL_LOCATION, TOTALAMOUNTPAID)
VALUES('1005286432','02-FEB-2013','C_7', 'E_106',
                                                               'A_102',
'UK_1234', '23-JAN-2014', '15-FEB-2014', 'HAWAII',
                                                              'NEW YORK', '800');
INSERT INTO RESERVATIONS
(RESERVATION_ID, RESERVATION_DATE, CUSTOMER_ID, EMPLOYEE_NO, BUS_NO,
```

```
BUS_DEPARTURE_LOCATION, BUS_ARRIVAL_LOCATION, BUS_DEPARTURE_DATE, BUS_ARRIVAL_DATE, TOTALAMOUNTPAID)
```

VALUES('1222653214', DEFAULT,'C\_2', 'E\_105', '6647','LOS ANGELES', 'SEATTLE', '21-SEP-2014 10:15:32 AM', '22-SEP-2014 04:22:36 PM','987');

INSERT INTO RESERVATIONS(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, HOTEL\_ID, HOTEL\_ROOMNO, HOTEL\_CHECKIN\_DATE, HOTEL\_CHECKOUT\_DATE, TOTALAMOUNTPAID)
VALUES('2346421654', '07-Jan-2014', 'C\_5', 'E\_102', 'H\_102', '201', '12-May-2014
12:00:00 AM', '17-May-2013 12:00:00 PM', '98');

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, AIRLINE\_ID, HOTEL\_ID, HOTEL\_ID, HOTEL\_ROOMNO, HOTEL\_CHECKIN\_DATE, HOTEL\_CHECKOUT\_DATE, AIRLINE\_FLIGHTNO, AIRLINE\_DATEOFDEPARTURE, AIRLINE\_DATEOFARRIVAL, AIRLINE\_DEPARTURE\_LOCATION, AIRLINE\_ARRIVAL\_LOCATION, TOTALAMOUNTPAID)

VALUES( '2548759654', '25 Jun 2013', 'C\_7', 'E\_104','A\_101','H\_104','254','10-Jul-2013 11:00:00 AM','26-Jul-2013 11:00:00 AM','IJ-893','05-JUL-2013 09:40:00 PM','31-JUL-2013 02:25:00 AM','HAWAII','SAN FRANCISCO','500');

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, AIRLINE\_ID, HOTEL\_ID, RENTALCAR\_ID, HOTEL\_ROOMNO, HOTEL\_CHECKIN\_DATE, HOTEL\_CHECKOUT\_DATE, RENTALCAR\_TYPE, RENTALCAR\_MODEL, RENTALCAR\_CHECKIN\_DATE, RENTALCAR\_CHECKOUT\_DATE, AIRLINE\_FLIGHTNO, AIRLINE\_DATEOFDEPARTURE, AIRLINE\_DATEOFARRIVAL, AIRLINE\_DEPARTURE\_LOCATION, AIRLINE\_ARRIVAL\_LOCATION, TOTALAMOUNTPAID) VALUES('1121684988', '03-AUG-2013', 'C\_7', 'E\_103', 'A\_106', 'H\_106', 'R\_101', '331', '22-DEC-2013 07:20:07 AM', '26-FEB-2014 10:16:05 'MINIVAN', 'CHEVROLET', '22-DEC-2013 09:00:00 AM', '26-FEB-2014 PM', 03:40:00 PM', 'NJ-87954', '22-Apr-2013 10:00:40 AM', '22-Apr-2013 05:50:00 'EVANSTON', 'HOUSTON', '623');

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, BUS\_ID, BUS\_NO, BUS\_DEPARTURE\_LOCATION, BUS\_ARRIVAL\_LOCATION, BUS\_DEPARTURE\_DATE, BUS\_ARRIVAL\_DATE, TOTALAMOUNTPAID)
VALUES('1013366786', '08-JUN-2013', 'C\_1', 'E\_106', 'B\_605',

VALUES('1013366786', '08-JUN-2013', 'C\_1', 'E\_106', 'B\_605',
'212', 'EVANSTON', 'CHICAGO', '22-Feb-2013 11:44:50 AM', '22-Feb-2013 04:02:50 PM',
'1345');

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, AIRLINE\_ID, AIRLINE\_FLIGHTNO, AIRLINE\_DATEOFDEPARTURE, AIRLINE\_DATEOFARRIVAL, AIRLINE\_DEPARTURE\_LOCATION, AIRLINE\_ARRIVAL\_LOCATION, TOTALAMOUNTPAID)
VALUES('4562408542', '13-Sep-2013', 'C\_3', 'E\_104', 'A\_103', 'KO-3701', '16-May-2014', '03:15:24 AM', '18-May-2014', 'SAN FRANCISCO', 'CHICAGO', '700');

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, RENTALCAR\_ID, RENTALCAR\_TYPE, RENTALCAR\_MODEL, RENTALCAR\_CHECKIN\_DATE, RENTALCAR\_CHECKOUT\_DATE, TOTALAMOUNTPAID)

VALUES('3181319319', '12-FEB-2014', 'C\_3', 'E\_102', 'R\_101', 'COMPACT', 'VOLKSWAGEN', '20-MAR-2014 07:12:52 AM', '24-Mar-2014 11:18:00 AM', '1449');

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, HOTEL\_ID, BUS\_ID, HOTEL\_ROOMNO, HOTEL\_CHECKIN\_DATE, HOTEL\_CHECKOUT\_DATE, BUS\_NO, BUS\_DEPARTURE\_LOCATION, BUS\_ARRIVAL\_LOCATION, BUS\_DEPARTURE\_DATE, BUS\_ARRIVAL\_DATE, TOTALAMOUNTPAID)

VALUES('3212118883', DEFAULT, 'C\_3', 'E\_105', 'H\_106', 'B\_601', '133', '24-May-2014 08:43:50 PM', '26-May-2014 03:50:00 PM', '14', 'SAN FRANCISCO', 'SEATTLE', '23-May-2014 04:20:00 PM', '23-May-2013 6:30:00 PM', '312');

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, AIRLINE\_ID, RENTALCAR\_ID, RENTALCAR\_TYPE, RENTALCAR\_MODEL, RENTALCAR\_CHECKIN\_DATE, RENTALCAR\_CHECKOUT\_DATE, AIRLINE\_FLIGHTNO, AIRLINE\_DATEOFDEPARTURE, AIRLINE\_DATEOFARRIVAL, AIRLINE\_DEPARTURE\_LOCATION, AIRLINE\_ARRIVAL\_LOCATION, TOTALAMOUNTPAID) VALUES('1231234121', '05-Jan-2014', 'C\_1', 'E\_103', 'A\_105', 'R\_106', '30-Apr-2014 06:01:00 PM', 'COMPACT', 'CHEVROLET', '21-May-2014 09:00:00 PM', '28-Apr-2014 10:00:05 AM', '30-MAY-2014 04:05:02 AM', 'OK-2900', ANGELES', 'NEW YORK', '1499');

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, RENTALCAR\_ID, RENTALCAR\_TYPE, RENTALCAR\_MODEL, RENTALCAR\_CHECKIN\_DATE, RENTALCAR\_CHECKOUT\_DATE, TOTALAMOUNTPAID)
VALUES('5456532548', '30-NOV-2013', 'C\_4', 'E\_104', 'R\_102', 'SEDAN', 'CHEVROLET', '23-Feb-2014 09:32:24 PM', '26-Feb-2014 01:40:50 AM', '777');

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, HOTEL\_ID, RENTALCAR\_ID, HOTEL\_ROOMNO, HOTEL\_CHECKIN\_DATE, HOTEL\_CHECKOUT\_DATE, RENTALCAR\_TYPE, RENTALCAR\_MODEL, RENTALCAR\_CHECKIN\_DATE, RENTALCAR\_CHECKOUT\_DATE, TOTALAMOUNTPAID)

VALUES('1038012983', '18-Aug-2013', 'C\_5', 'E\_102', 'H\_103', 'R\_104', '041', '06-May-2014 11:08:03 AM', '08-May-2014 03:40:45 PM', 'SUV', 'LEXUS', '07-May-2014 02:49:47 PM', '08-May-2014 07:09:27 PM', '400');

#### INSERT INTO RESERVATIONS

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, AIRLINE\_ID, RENTALCAR\_ID, RENTALCAR\_TYPE, RENTALCAR\_MODEL, RENTALCAR\_CHECKIN\_DATE, RENTALCAR\_CHECKOUT\_DATE, AIRLINE\_FLIGHTNO, AIRLINE\_DATEOFDEPARTURE, AIRLINE\_DATEOFARRIVAL, AIRLINE\_DEPARTURE\_LOCATION, AIRLINE\_ARRIVAL\_LOCATION, TOTALAMOUNTPAID)

VALUES('1242141221', DEFAULT, 'C\_4', 'E\_107', 'A\_103', 'R\_107', 'SEDAN', 'FORD', '29-MAY-2014', '30-MAY-2014 04:05:10 PM', 'LA-705', '21-MAY-2014 07:36:28 AM', '02-JUN-2014 03:02:31 PM', 'GLENDALE', 'SAN FRANCISCO', '410');

#### INSERT INTO RESERVATIONS

(RESERVATION\_ID, RESERVATION\_DATE, CUSTOMER\_ID, EMPLOYEE\_NO, AIRLINE\_ID, HOTEL\_ID, HOTEL\_ID, HOTEL\_ROOMNO, HOTEL\_CHECKIN\_DATE, HOTEL\_CHECKOUT\_DATE, AIRLINE\_FLIGHTNO, AIRLINE\_DATEOFDEPARTURE, AIRLINE\_DATEOFARRIVAL, AIRLINE\_DEPARTURE\_LOCATION, AIRLINE\_ARRIVAL\_LOCATION, TOTALAMOUNTPAID)

VALUES('1898787981', '01-MAR-2014', 'C\_1', 'E\_104', 'A\_107', 'H\_105', '2227', '04-Jul-2014 10:20:43 PM', '24-Jul-2014 04:00:50 PM', 'EV-31134', '04-Jul-2014 05:17:38 PM', '24-Jul-2014 08:03:18 PM', 'PRINCETON', 'PROVIDENCE', '1024');

DELETE FROM BUS WHERE BUS\_STATE = 'VA';

INSERT INTO BUS

VALUES('B\_606', 'GOTIM', '219 REALM STREET', 'MIDDLE EARTH', 'VA', '93013-7223', '8889391384', 'gotim@ymail.com', '938475919');

UPDATE RENTAL\_CAR
SET RENTALCAR\_CITY = 'ALPHRETTA', RENTALCAR\_STATE = 'GA'
WHERE RENTALCAR\_ID = 'R\_101';

```
Select Statements:
SET LINESIZE 450:
SELECT * FROM RENTAL_CAR;
SELECT DISTINCT BUS_ID, BUS_NAME FROM BUS;
SELECT A.AIRLINE_ID, A.AIRLINE_NAME, R.AIRLINE_FLIGHTNO, R.AIRLINE_DATEOFDEPARTURE,
R. TOTALAMOUNTPAID
FROM AIRLINE A, RESERVATIONS R
WHERE A.AIRLINE_ID = R.AIRLINE_ID
AND R.RESERVATION_ID= 1242141221;
SELECT EMP_LASTNAME, EMP_FIRSTNAME, EMP_SALARY, EMP_JOB FROM EMPLOYEE WHERE EMPLOYEE_NO=
'E_103';
SELECT C.CUSTOMER_ID, C.CUST_LASTNAME, R.RESERVATION_ID, R.EMPLOYEE_NO, R.TOTALAMOUNTPAID
FROM RESERVATIONS R, CUSTOMER C
WHERE C.CUSTOMER_ID = R.CUSTOMER_ID
AND R.TOTALAMOUNTPAID > 1000
ORDER BY C.CUST_LASTNAME;
SELECT CUSTOMER_ID, COUNT(CUSTOMER_ID)"TOTAL NO. OF RESERVATIONS", SUM(TOTALAMOUNTPAID)
"TOTAL AMOUNT SPENT"
FROM RESERVATIONS
GROUP BY CUSTOMER_ID
HAVING SUM(TOTALAMOUNTPAID) > 1000
ORDER BY CUSTOMER_ID;
SELECT HOTEL_NAME, HOTEL_STREET, HOTEL_CONTACTNO, HOTEL_EMAIL
FROM HOTEL
WHERE NOT EXISTS (SELECT HOTEL_ID FROM RESERVATIONS WHERE HOTEL_ROOMNO = 045);
SELECT C.CUSTOMER_ID, R.EMPLOYEE_NO, C.CUST_LASTNAME, C.CUST_FIRSTNAME, R.RENTALCAR_ID,
R.RENTALCAR_CHECKIN_DATE, R.RENTALCAR_CHECKOUT_DATE, R.TOTALAMOUNTPAID
FROM RESERVATIONS R, CUSTOMER C
WHERE C.CUSTOMER_ID = R.CUSTOMER_ID
AND (C.CUST_LASTNAME LIKE '%R__'
AND C.CUST_FIRSTNAME LIKE 'J%'
OR R.AIRLINE_ID IS NOT NULL )
AND R.TOTALAMOUNTPAID = 410;
SELECT BUS_ID, BUS_NAME, BUS_CONTACTNO, BUS_BANKNUMBER
FROM BUS
WHERE BUS_STATE IN('WA', 'VA')
OR BUS_NAME LIKE 'M__%'
ORDER BY BUS_ID, BUS_BANKNUMBER;
SELECT R.RESERVATION_ID, C.CUSTOMER_ID, C.CUST_LASTNAME, R.EMPLOYEE_NO, R.TOTALAMOUNTPAID
FROM RESERVATIONS R, CUSTOMER C
WHERE R.CUSTOMER_ID = C.CUSTOMER_ID
AND R.AIRLINE_ID IN (SELECT AIRLINE_ID FROM AIRLINE WHERE AIRLINE_NAME = 'HAWAIIAN')
AND R.RENTALCAR_ID IN (SELECT RENTALCAR_ID FROM RENTAL_CAR WHERE
```

RENTALCAR\_NAME='ENTERPRISE'AND RENTALCAR\_STATE = 'CA')
AND R.HOTEL\_ID IS NOT NULL
AND R.RESERVATION\_DATE = '26-APR-2014';

### SQL\_logfile

```
<<< Log from unixlab.sfsu.edu started May 10, 2014, 19:11:01 >>>
[tarung@unixlab SQL_Group_project]$ sqlplus /
SQL*Plus: Release 11.2.0.3.0 Production on Sat May 10 19:11:21 2014
Copyright (c) 1982, 2011, Oracle. All rights reserved.
Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options
SQL> start create_statements.sql;
Table created.
Table altered.
Table altered.
Table dropped.
Table created.
SQL> select * from tab;
                             TABTYPE CLUSTERID
TNAME
----- -----
AIRLINE
                              TABLE
                              TABLE
BUS
CUSTOMER
                              TABLE
EMPLOYEE
                              TABLE
HOTEL
                             TABLE
RENTAL CAR
                              TABLE
RESERVATIONS
                              TABLE
7 rows selected.
SQL> start insert_statements.sql;
1 row created.
```

1 row created.

```
SQL_logfile
1 row created.
1 row created.
1 row created.
 row created.
1 row created.
 row created.
1 row created.
 row created.
1 row created.
 row created.
1 row deleted.
1 row created.
1 row updated.
SQL> COMMIT;
Commit complete.
<<< Log from unixlab.sfsu.edu ended May 10, 2014, 19:14:49 >>>
```

<<< Log from unixlab.sfsu.edu started May 14, 2014, 01:34:00 >>>

SQL> start select\_statements.sql;

## SQL\_logfile

			RENTALCAR_CITY			
  R_101 AVIS	30 CAMPUS DRIVE		ALPHRETTA	GA 94		
014-8362 973864767	6509876578 HQ@AVIS.COM					
R_102 HERTZ	40 SUNSHINE ROA	D	ORLANDO	FL 94		
066-9383	6509870987 HQ@HERTZ.COM					
926478563 R_103 ENTERPRISE	1029 FUNNY STRE	FT	SAN FRANCISCO	CA 94		
102-1321	4156768925 HQ@ENTERPRISE.		5/11 1101110150	C/C J I		
837645167	401 CTTV STREET		BBOOKYI N	NIV Q4		
R_104 DOLLAR 402-4132	401 CITY STREET 6508763521 HQ@DOLLAR.COM		BROOKYLN	NY 94		
983716356				0.4		
R_105 NATIONAL 102-6251	139 ANYWHERE ST 4156749302 HQ@NATIONAL.CO		SAN FRANCISCO	CA 94		
263516278						
R_106 THRIFTY 015-6253	736 HAPPY STREE		AUSTIN	TX 94		
836451739	6508372681 HQ@THRIFTY.COM					
R_107 BUDGET	410 B STREET		ATLANTA	GA 94		
014-6522 274542678	6509873521 HQ@BUDGET.COM					
7 rows selected.  BUS_I BUS_NAMEB_601 GREYHOUND B_602 FOXHOUND B_603 MUNI B_604 SAMTRANS B_605 MOUNTAIN B_607 BUSEY B_606 GOTIM  7 rows selected.						
AIRLI AIRLINE_NA TOTALAMOUN		AIRLINE_DATEOFD	EPARTURE			
A_103 SOUTHWEST 410	LA-705		.28.000000 AM			
EMP_LASTNAME	EMP_FIRSTNAME	EMP_SA	LARY EMP_JOB			
YUKI	WHOBREY	4	7122 CEO			
CUSTO CUST_LASTN	AME RESERVATIO	EMPLO TOTALAMOU	NTPAID			
C_1 AITO	1898787981	E_104	1024			
C_1 AITO	1231234121	E_103	1499			
Page 3						

C_1 AITO C_3 CHOW	101336	QL_logfile 66786 E_106 19319 E_102	1345 1449				
CUSTO TOTAL NO. OF R	RESERVATIONS TOTAL	AMOUNT SPENT					
C_1 C_2 C_3 C_4 C_7	3 2 3 2 3 2 3	3868 1341 2461 1187 1923					
HOTEL_NAME	HOTEL_STREET		HOTEL_CONTACTNO	HOTEL_EMAIL			
AMBASSADOR	60 LINCOLN WAY		4152813819	ambassador@			
aol.com WESTIN ST FRANCIS	789 AIRLINE BLVD		4157656575	westinfranc			
<pre>@hotmail.com CASA MARINA hotmail.com FLAMINGO ail.com ALA MOANA</pre>	8913 SUNRISE ST		4079276352	casamarina@			
	211 BEACH AVE		3051322422	flamingo@gm			
	9912 TURTLE COVE	LANE	8085356498	alamoana@gm			
ail.com TURTLE BAY	871 BEACH ST		8088273739	turtle.bay@			
mail.yahoo.com TRUMP .com	972 TULLEY RD		2127361625	trump@gmail			
7 rows selected.							
CUSTO EMPLO CUST_LAS _CHECKIN_DATE CKOUT_DATE	STNAME	CUST_FIRSTNAM	RI	TA RENTALCAR ENTALCAR_CHE AMOUNTPAID			
C_4 E_107 CRUZ JOSE R_107 29-MAY-1 12.00.00.000000 AM 30-MAY-14 04 05.10.000000 PM 410							
BUS_I BUS_NAME BUS_CONTACTNO BUS_BANKNUMBER							
B_603 MUNI B_605 MOUNTAIN B_606 GOTIM B_607 BUSEY	93892839	988 99200 291 94859 384 93847 192 39102	1939				
RESERVATIO CUSTO CUST_LASTNAME EMPLO TOTALAMOUNTPAID							
1241844889 C_2 BUR		E_102	354				
SQL>							

<<< Log from unixlab.sfsu.edu ended May 14, 2014, 01:34:18 >>>