

GROUP 1

POST OFFICE DATABASE
CSS 475

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Database Final Project- Post Office

Going_Postal.db

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OVERVIEW

Our Database application is centered around a delivery service of Post Offices. This application is designed to be a nationwide service of which the Database keeps track of information regarding all Post Offices (in different cities/states), employees, customers, trucks, packages, stops, truck driving sessions, etc. Our Database file, included in the assignment submission, is titled GOING_POSTAL.db.

The Database contains numerous tables and data regarding this real world application. It is able to accommodate many functions including but not limited to:

- List the customer information for all customers who have both sent and received a package.
- List the customer information for all customers who live on the West Coast (Via the Zip).
- List the information for each truck type including: the class, max weight, max volume, and number of trucks for each type.
- List all the trucks that are controlled by Post Office 'X' at time 'Y'.
- List information regarding the employee and truck number for all driving sessions that started on September 10th.
- List the stops a package hits when travelling from sender to receiver.

The following functions listed below were specified in the initial Project Proposal but are no longer applicable to our Database after altering some components in the design phase:

- Retrieve the name, employee number of mailman who drove truck 'xxxx' on Monday after 1pm, which routes they took and their post office.
 - Our current database is able to retrieve the employee name, number, and post office of the mailman who drove truck 'xxxx' at the given time, but not the specific routes they took.
- Retrieve the id number, mailman employee number, employee name of trucks who drove to mailroute 'xxxx' and recipient's address.
 - Our current database does not record information about which employees have driven which routes.

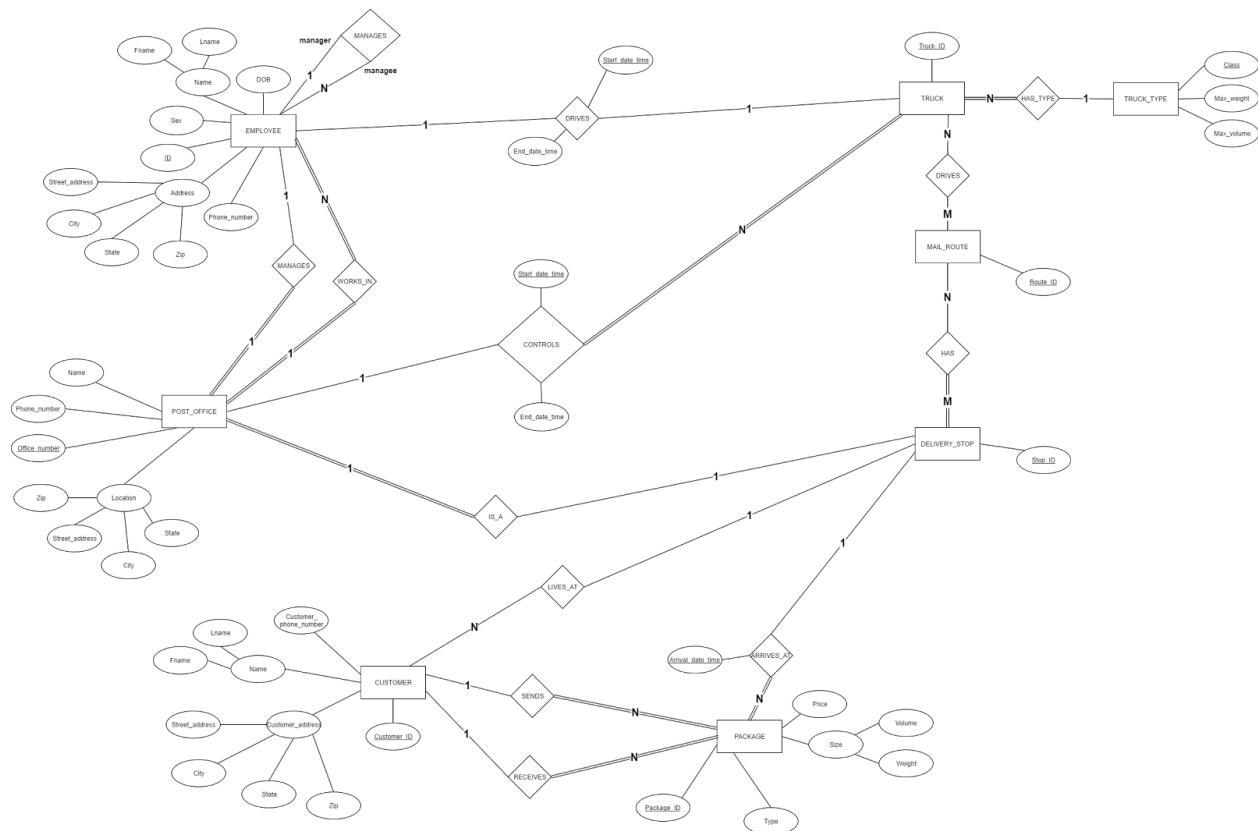
Project Assumptions

- Employees who are managers cannot drive trucks.

- Every route stop on a route is visited when a truck drives the route.
- Any post office can use a truck, but only one post office can use one truck at a time.
- All packages are shipped via normal shipping (so no express shipping). Therefore price is a function of type, weight, and volume.
- Package price is determined by external factors such as shipping speed, in addition to type, weight, and volume.
- All weights are in pounds and all volumes are in cubic inches.
- Each zip code only has one post office.
- Not all CUSTOMERS live at a DELIVERY_STOP, for example if a CUSTOMER moves somewhere where mail is not delivered.

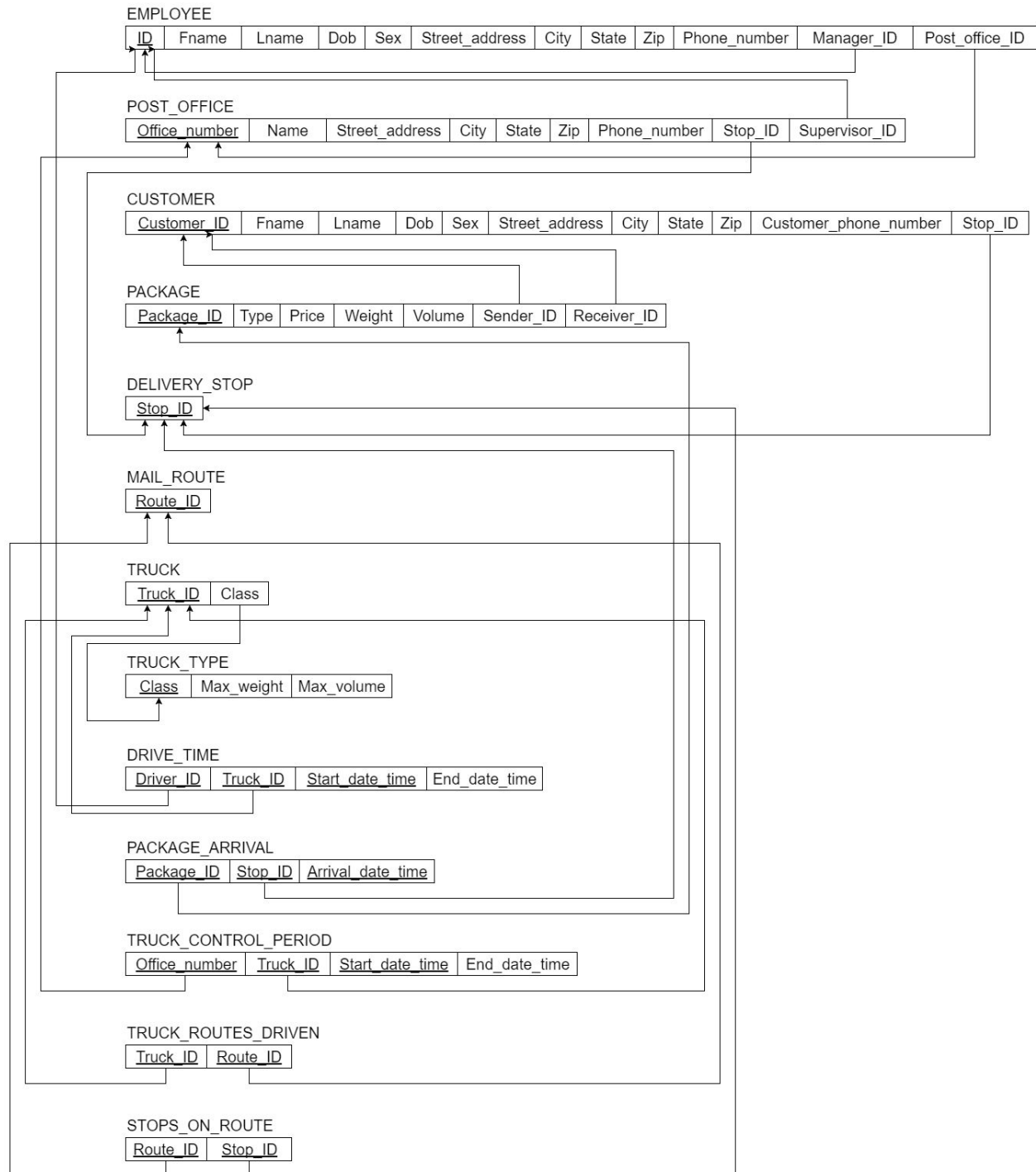
ENTITY RELATIONSHIP DIAGRAM

FIGURE 1: ER Diagram



RELATIONAL DATA MODEL SCHEMA

FIGURE 1.2: RELATIONAL SCHEMA



Relationship Data Model Constraints

Listed below are business constraints in our database:

- A manager (EMPLOYEE) can only manage one post office.

Listed below are domain constraints enforced in our Database:

- All zip codes must be limited to 5 digits, ranging from 501 to 99,999 inclusive.
- All phone numbers must be limited to 10 digits, ranging from >0 to <10000000000.
- Sex of Employees and Customers is limited to 'M' for male and 'F' for female, case insensitive.
- All end dates/times must be greater than start dates/times.
- For PACKAGE, Type must either be 'Box', 'Envelope', or 'Postcard', case insensitive.
- For PACKAGE, Price, Weight, and Volume must be greater than or equal to 0.
- For TRUCK_TYPE, Max_weight and Max_volume must be greater than 0.

Listed below are foreign key constraints which disallow deletion (ON DELETE RESTRICT):

- An EMPLOYEE or TRUCK cannot be deleted if an entry in DRIVE_TIME references it.
- A DELIVERY_STOP cannot be deleted if that DELIVERY_STOP represents a POST_OFFICE, as by definition all POST_OFFICES are DELIVERY_STOPS.
- A TRUCK_TYPE cannot be deleted if there is a TRUCK entry of that type.

CREATED TABLES

EMPLOYEE: Holds information about post office employees, some of which are drivers.

POST_OFFICE: Holds information about a specific post office.

CUSTOMER: Holds information about people who can send or receive mail.

PACKAGE: Holds information about a specific package.

DELIVERY_STOP: Describes a stop a driver can deliver mail to (either a POST_OFFICE or a CUSTOMER's residence).

MAIL_ROUTE: A collection of DELIVERY_STOPS that a driver will visit when driving that route.

TRUCK: Holds information about a specific truck.

TRUCK_TYPE: Holds information about a certain class of truck.

DRIVE_TIME: Holds information about what time an EMPLOYEE was driving a TRUCK.

PACKAGE_ARRIVAL: Holds information about what time a PACKAGE was dropped off at a delivery stop.

TRUCK_CONTROL_PERIOD: Holds information about which POST_OFFICE is using a TRUCK for a certain period of time. Useful for keeping track of long-distance routes, such as Los Angeles to New York.

TRUCK_ROUTES_DRIVEN: Keeps track of which TRUCK has driven a specific ROUTE.

STOPS_ON_ROUTE: Holds information about which DELIVERY_STOPS are on a specific route. DELIVERY_STOPS can be assigned to multiple ROUTES.

SQL TABLE CREATION

```
CREATE TABLE `CUSTOMER` (  
    `Cus_ID`      VARCHAR(6) NOT NULL,  
    `Cus_fname`   VARCHAR  NOT NULL,  
    `Cus_lname`   VARCHAR  NOT NULL,  
    `Cus_DOB`     DATE,  
    `Cus_sex`     CHAR(1) CHECK(Cus_sex in ( "M" , "F" )) COLLATE NOCASE,  
    `Cus_streetaddress` VARCHAR,  
    `Cus_city`    VARCHAR,  
    `Cus_state`   VARCHAR(2),  
    `Cus_ZIP`     INTEGER CHECK (Cus_ZIP >= 501 AND Cus_ZIP < 100000),  
    `Cus_phonenumber` INTEGER CHECK (Cus_phonenumber >= 0 AND  
Cus_phonenumber < 10000000000),  
    `Cus_stopID` VARCHAR(6),  
    PRIMARY KEY(`Cus_ID`),  
    FOREIGN KEY(Cus_stopID) REFERENCES DELIVERY_STOP(Stop_ID) ON  
UPDATE CASCADE ON DELETE SET NULL  
);
```

```
CREATE TABLE `DELIVERY_STOP` (  
    `Stop_ID`     VARCHAR(6) NOT NULL,  
    PRIMARY KEY(`Stop_ID`)  
);
```

```
CREATE TABLE `DRIVE_TIME` (  
    `DT_driverID` VARCHAR(6) NOT NULL,  
    `DT_truckID`  VARCHAR(6) NOT NULL,  
    `DT_startdate_time` DATE NOT NULL,  
    `DT_enddate_time`  DATE CHECK (DT_enddate_time > DT_startdate_time),  
    PRIMARY KEY(`DT_driverID`, `DT_truckID`, `DT_startdate_time`),  
    FOREIGN KEY(DT_driverID) REFERENCES EMPLOYEE(Emp_ID) ON UPDATE  
CASCADE ON DELETE RESTRICT,  
    FOREIGN KEY(DT_truckID) REFERENCES TRUCK(Truck_ID) ON UPDATE  
CASCADE ON DELETE RESTRICT  
);
```

```
CREATE TABLE `EMPLOYEE` (  
    `Emp_ID`    VARCHAR(6) NOT NULL,  
    `Emp_fname` VARCHAR NOT NULL,  
    `Emp_lname` VARCHAR NOT NULL,  
    `Emp_DOB`   DATE NOT NULL,  
    `Emp_sex`   CHAR(1) CHECK(EMP_sex in ( "M" , "F" )) COLLATE NOCASE,  
    `Emp_streetaddress` VARCHAR,  
    `Emp_city`  VARCHAR,  
    `Emp_state` VARCHAR(2),  
    `Emp_ZIP`   INTEGER CHECK (Emp_ZIP > 501 AND Emp_ZIP < 100000),  
    `Emp_phonenumber` INTEGER CHECK (Emp_phonenumber >= 0 AND  
Emp_phonenumber < 10000000000),  
    `Emp_managerID`   VARCHAR(6),  
    `Emp_postofficeID` VARCHAR(6),  
    PRIMARY KEY(`Emp_ID`),  
    FOREIGN KEY(Emp_managerID) REFERENCES EMPLOYEE(Emp_ID) ON  
UPDATE CASCADE ON DELETE SET NULL,  
    FOREIGN KEY(Emp_postofficeID) REFERENCES POST_OFFICE(PO_ID) ON  
UPDATE CASCADE ON DELETE SET NULL  
);
```

```
CREATE TABLE `MAIL_ROUTE` (  
    `Route_ID`   VARCHAR(6) NOT NULL,  
    PRIMARY KEY(`Route_ID`)  
);
```

```
CREATE TABLE `PACKAGE` (  
    `Pack_ID`    VARCHAR(6) NOT NULL,  
    `Pack_type`  VARCHAR CHECK(Pack_type in ('Box', 'Envelope', 'Postcard'))  
COLLATE NOCASE,  
    `Pack_price` DOUBLE CHECK (Pack_price >= 0),  
    `Pack_weight` DOUBLE CHECK (Pack_weight >= 0) ,  
    `Pack_volume`    DOUBLE CHECK (Pack_volume >= 0),  
    `Pack_senderID`  VARCHAR(6),  
    `Pack_receiverID` VARCHAR(6),
```

```
PRIMARY KEY('Pack_ID'),
FOREIGN KEY(Pack_senderID) REFERENCES CUSTOMER(Cus_ID) ON UPDATE
CASCADE ON DELETE SET NULL,
FOREIGN KEY(Pack_receiverID) REFERENCES CUSTOMER(Cus_ID) ON UPDATE
CASCADE ON DELETE SET NULL
);
```

```
CREATE TABLE 'PACKAGE_ARRIVAL' (
    'PA_packageID'    VARCHAR(6) NOT NULL,
    'PA_stopID'    VARCHAR(6) NOT NULL,
    'PA_arrivaldate_time' DATE NOT NULL,
    PRIMARY KEY('PA_packageID', 'PA_stopID', 'PA_arrivaldate_time'),
    FOREIGN KEY(PA_packageID) REFERENCES PACKAGE(Pack_ID) ON UPDATE
    CASCADE ON DELETE CASCADE,
    FOREIGN KEY(PA_stopID) REFERENCES DELIVERY_STOP(Stop_ID) ON
    UPDATE CASCADE ON DELETE CASCADE
);
```

```
CREATE TABLE 'POST_OFFICE' (
    'PO_ID'    VARCHAR(6) NOT NULL,
    'PO_name'    VARCHAR,
    'PO_streetaddress'    VARCHAR,
    'PO_city'    VARCHAR,
    'PO_state'    VARCHAR(2),
    'PO_ZIP'    INTEGER CHECK (PO_ZIP >= 501 AND PO_ZIP < 100000),
    'PO_phonenumber'    INTEGER CHECK (PO_phonenumber >= 0 AND
    PO_phonenumber < 10000000000),
    'PO_stopID'    VARCHAR(6),
    'PO_supervisorID'    VARCHAR(6),
    PRIMARY KEY('PO_ID'),
    FOREIGN KEY(PO_stopID) REFERENCES DELIVERY_STOP(Stop_ID) ON
    UPDATE CASCADE ON DELETE RESTRICT,
    FOREIGN KEY(PO_supervisorID) REFERENCES EMPLOYEE(Emp_ID) ON
    UPDATE CASCADE ON DELETE SET NULL
);
```

```
CREATE TABLE `STOPS_ON_ROUTE` (  
    `SOR_routeID`      VARCHAR(6) NOT NULL,  
    `SOR_stopID`       VARCHAR(6) NOT NULL,  
    PRIMARY KEY(`SOR_routeID`, `SOR_stopID`),  
    FOREIGN KEY(SOR_routeID) REFERENCES MAIL_ROUTE(Route_ID) ON  
UPDATE CASCADE ON DELETE CASCADE,  
    FOREIGN KEY(SOR_stopID) REFERENCES DELIVERY_STOP(Stop_ID) ON  
UPDATE CASCADE ON DELETE CASCADE  
);
```

```
CREATE TABLE `TRUCK` (  
    `Truck_ID`        VARCHAR(6) NOT NULL,  
    `Truck_class`     CHAR(1),  
    PRIMARY KEY(`Truck_ID`),  
    FOREIGN KEY(Truck_class) REFERENCES TRUCK_TYPE(Truck_type_class) ON  
UPDATE CASCADE ON DELETE RESTRICT  
);
```

```
CREATE TABLE `TRUCK_CONTROL_PERIOD` (  
    `TCP_officenum`   VARCHAR(6) NOT NULL,  
    `TCP_truckID`     VARCHAR(6) NOT NULL,  
    `TCP_startdate_time` DATE NOT NULL,  
    `TCP_enddate_time` DATE,  
    PRIMARY KEY(`TCP_officenum`, `TCP_truckID`, `TCP_startdate_time`),  
    FOREIGN KEY(TCP_officenum) REFERENCES POST_OFFICE(PO_ID) ON  
UPDATE CASCADE ON DELETE CASCADE,  
    FOREIGN KEY(TCP_truckID) REFERENCES TRUCK(Truck_ID) ON UPDATE  
CASCADE ON DELETE CASCADE  
);
```

```
CREATE TABLE `TRUCK_ROUTES_DRIVEN` (  
    `TRD_truckID`     VARCHAR(6) NOT NULL,  
    `TRD_routeID`     VARCHAR(6) NOT NULL,  
    PRIMARY KEY(`TRD_truckID`, `TRD_routeID`),  
    FOREIGN KEY(TRD_truckID) REFERENCES TRUCK(Truck_ID) ON UPDATE  
CASCADE ON DELETE CASCADE,
```

```
FOREIGN KEY(TRD_routeID) REFERENCES ROUTE(Route_ID) ON UPDATE  
CASCADE ON DELETE CASCADE  
);
```

```
CREATE TABLE `TRUCK_TYPE` (  
    `Truck_type_class` CHAR(1) NOT NULL,  
    `Truck_type_max_weight` INTEGER CHECK (Truck_type_max_weight > 0),  
    `Truck_type_max_volume` INTEGER CHECK (Truck_type_max_volume > 0),  
    PRIMARY KEY(`Truck_type_class`)  
);
```

TABLE POPULATION

EMPLOYEE

INSERT into EMPLOYEE values ('E03489', 'Tom', 'Smith', '1995-08-02', 'M', '14450 NE 32th St', 'Bellevue', 'WA', 98006,4252232424, NULL, 'P21746');

INSERT into EMPLOYEE values ('E22469', 'Ken', 'Jon', '1945-04-09', 'M', '11773 W 38th St', 'Bellevue', 'WA', 98006,4258569911,'E03489', 'P21746');

INSERT into EMPLOYEE values ('E03111', 'Lee', 'Vaughn', '1977-08-08', 'M', '13200 SE 56th St', 'Bellevue', 'WA', 98006,4258235656,'E03489', 'P21746');

INSERT into EMPLOYEE values ('E03394', 'Carrie', 'Fisher', '1987-07-04', 'F', '15441 NE 28th St', 'Bellevue', 'WA', 98008,4251123232, NULL, 'P12474');

INSERT into EMPLOYEE values ('E07789', 'Mary', 'Tee', '1999-02-11', 'F', '1115 116th St SE', 'Lynnwood', 'WA', 98036 ,3065631212, NULL, 'P06735');

INSERT into EMPLOYEE values ('E83121', 'Justin', 'Tyme', '1995-12-02', 'M', '15700 NE 48th St', 'Bellevue', 'WA', 98008 ,5027787867,'E03394', 'P12474');

INSERT into EMPLOYEE values ('E92833', 'Dew', 'Maunt', '1960-10-10', 'M', '2205 133th St SW', 'Lynnwood', 'WA', 98036,3068912121,'E07789', 'P06735');

INSERT into EMPLOYEE values ('E99612', 'Chee', 'Tos', '1977-04-05', 'M', '1211 Wilcox Ave', 'Los Angeles', 'CA', 90028, 5059877877, NULL , 'P12574');

INSERT into EMPLOYEE values ('E74015', 'Jill', 'Heinz', '1991-08-12', 'F', '1440 Wilshire Ave', 'Los Angeles', 'CA', 90030, 505121132,'E99612', 'P12574');

INSERT into EMPLOYEE values ('E44489', 'Gary', 'Dick', '1975-09-02', 'M', '111 W 21rd St', 'New York', 'NY', 10012, 3067125432, NULL, 'P25986');

INSERT into EMPLOYEE values ('E16689', 'Ron', 'Howard', '1992-02-02', 'M', '11250 SE 22th St', 'Bellevue', 'WA', 98006,4251132124, 'E03489', 'P21746');

INSERT into EMPLOYEE values ('E28129', 'Cart', 'Man', '1975-07-09', 'M', '10003 W 58th St', 'Bellevue', 'WA', 98006,4259543811,'E03489', 'P21746');

INSERT into EMPLOYEE values ('E07881', 'Oswald', 'Waggner', '1982-02-08', 'M', '11877 SE 16th St', 'Bellevue', 'WA', 98006,4257499116, 'E03489', 'P21746');

INSERT into EMPLOYEE values ('E67754', 'Kimberly', 'Her', '1988-01-04', 'F', '29941 NE 78th St', 'Bellevue', 'WA', 98008,4257732828, 'E03394', 'P12474');

INSERT into EMPLOYEE values ('E77789', 'Michelle', 'Michelle', '1999-02-11', 'F', '2115 125th St SW', 'Lynnwood', 'WA', 98036 ,3065631212, 'E07789', 'P06735');

INSERT into EMPLOYEE values ('E21112', 'Jack', 'Daniels', '1991-05-05', 'M', '12110 NE 68th St', 'Bellevue', 'WA', 98008 ,5027787867,'E03394', 'P12474');

INSERT into EMPLOYEE values ('E55121', 'Leeroy', 'Jenkins', '1963-10-12', 'M', '2455 134th St SE', 'Lynnwood', 'WA', 98036,3068912121,'E07789', 'P06735');

```
INSERT into EMPLOYEE values ('E21882', 'Bill', 'Boggut', '1979-04-12', 'M', '1001 Wilcox Ave', 'Los Angeles', 'CA', 90028, 5054554343, 'E99612', 'P12574');
INSERT into EMPLOYEE values ('E77665', 'Joann', 'Mauch', '1990-03-09', 'F', '2140 Wilshire Ave', 'Los Angeles', 'CA', 90030, 505044432, 'E99612', 'P12574');
INSERT into EMPLOYEE values ('E87221', 'Riese', 'Leek', '1982-05-11', 'F', '144 W 22rd St', 'New York', 'NY', 10012, 2134322233, 'E03489', 'P25986');
```

POST_OFFICE

```
INSERT INTO POST_OFFICE VALUES ('P21746', 'Midlakes', '12400 SE 38th St', 'Bellevue', 'WA', 98006, 4257474539, 'S46146', 'E03489');
INSERT INTO POST_OFFICE VALUES ('P12474', 'Crossroads', '15731 NE 8th St', 'Bellevue', 'WA', 98008, 4254010892, 'S24982', 'E03394');
INSERT INTO POST_OFFICE VALUES ('P06735', 'Totally Not Fake Post Office', '3715 196th St SW', 'Lynnwood', 'WA', 98036, 8002758777, 'S16578', 'E07789');
INSERT INTO POST_OFFICE VALUES ('P12574', 'Little Big Hill', '1615 Wilcox Ave', 'Los Angeles', 'CA', 90028, 8002758777, 'S25837', 'E99612');
INSERT INTO POST_OFFICE VALUES ('P25986', 'Madison Square Station', '149 E 23rd St', 'New York', 'NY', 10010, 2126733770, 'S41572', 'E44489');
```

CUSTOMER

```
INSERT INTO CUSTOMER VALUES('C00000', 'Buster', 'Keaton', '1992-01-10', 'M', '222 10th St', 'Bellevue', 'WA', 98006, 2064426464, 'S11424');
INSERT INTO CUSTOMER VALUES('C03401', 'Gina', 'Smith', '1990-05-11', 'F', '643 111th ave', 'Bellevue', 'WA', 98008, 2064311464, 'S25352');
INSERT INTO CUSTOMER VALUES('C41411', 'Andy', 'Garcia', '1974-06-07', 'M', '555 190th ave', 'Bellevue', 'WA', 98008, 2064656859, 'S23457');
INSERT INTO CUSTOMER VALUES('C13525', 'Bill', 'Nye', '1944-04-01', 'M', '153 1st st', 'Bellevue', 'WA', 98006, 2069387464, 'S27252');
INSERT INTO CUSTOMER VALUES('C63425', 'Shane', 'Lol', '2000-01-20', 'M', '475 124 st', 'Bellevue', 'WA', 98008, 2069183518, 'S23252');
INSERT INTO CUSTOMER VALUES('C63730', 'Michael', 'Clark', '1970-11-12', 'M', '501 Cherry St', 'Lynnwood', 'WA', 98036, 2069326464, 'S11525');
INSERT INTO CUSTOMER VALUES('C52561', 'Julie', 'Nonickel', '1979-02-14', 'F', '508 Tree ave', 'Lynnwood', 'WA', 98036, 2043343278, 'S71525');
INSERT INTO CUSTOMER VALUES('C90656', 'Conor', 'Mark', '1981-07-15', 'M', '965 M ave', 'Lynnwood', 'WA', 98036, 2067340098, 'S75524');
```

```
INSERT INTO CUSTOMER VALUES('C87656','Elijah','Edelweiss','1984-03-17','M','675
Mellow st','Lynnwood','WA',98036,2067340539,'S75127');
INSERT INTO CUSTOMER VALUES('C04264','Kim','Night','1987-06-23','F','699 29th
st','Lynnwood','WA',98036,2069164053,'S45827');
INSERT INTO CUSTOMER VALUES('C45756','Jason','Stripe','1991-04-17','M','908 Jello
st','New York','NY',10010,2129045262,'S27887');
INSERT INTO CUSTOMER VALUES('C15466','Freddy','Nice','2017-03-01','M','322 Pudding
st','New York','NY',10010,2129034322,'S24097');
INSERT INTO CUSTOMER VALUES('C42699','Plain','Jane','2015-01-01','M','527 Burger
ave','New York','NY',10010,2129034322,'S20097');
INSERT INTO CUSTOMER VALUES('C15476','Ghetto','Thechoppa','1990-05-07','M','123
Grand ave','New York','NY',10010,2129039323,'S40097');
INSERT INTO CUSTOMER VALUES('C38493','Spring','Rolls','2010-07-10','M','785 F st','New
York','NY',10010,2129021399,'S20143');
INSERT INTO CUSTOMER VALUES('C86300','Kelly','Louis','1964-12-10','F','6781 Baker
St','Los Angeles','CA',90028,2062347664,'S22124');
INSERT INTO CUSTOMER VALUES('C26430','Heather','Johnson','1980-09-25','F','753 Sprint
ave','Los Angeles','CA',90028,2132337744,'S32724');
INSERT INTO CUSTOMER VALUES('C26311','Jack','Rivers','1981-08-11','M','212 Sprint
ave','Los Angeles','CA',90028,2137137121,'S51249');
INSERT INTO CUSTOMER VALUES('C24124','Nancy','Esther','1985-10-09','F','899 50th
st','Los Angeles','CA',90028,2134441651,'S57549');
INSERT INTO CUSTOMER VALUES('C24871','Jim','Drew','1990-06-11','M','149 51th st','Los
Angeles','CA',90028,2133541511,'S90519');
```

TRUCK

```
INSERT INTO TRUCK VALUES('T12548','A');
INSERT INTO TRUCK VALUES('T08679','B');
INSERT INTO TRUCK VALUES('T90826','B');
INSERT INTO TRUCK VALUES('T47683','C');
INSERT INTO TRUCK VALUES('T59237','C');
INSERT INTO TRUCK VALUES('T24386','C');
INSERT INTO TRUCK VALUES('T34687','C');
INSERT INTO TRUCK VALUES('T03648','C');
INSERT INTO TRUCK VALUES('T42897','D');
INSERT INTO TRUCK VALUES('T81653','D');
INSERT INTO TRUCK VALUES('T97648','D');
INSERT INTO TRUCK VALUES('T78865','D');
```



```
INSERT INTO TRUCK VALUES('T76415', 'D');
INSERT INTO TRUCK VALUES('T12934', 'D');
INSERT INTO TRUCK VALUES('T92354', 'D');
INSERT INTO TRUCK VALUES('T98421', 'B');
INSERT INTO TRUCK VALUES('T12345', 'A');
```

TRUCK TYPE

```
INSERT INTO TRUCK_TYPE VALUES('A', 9000000000000,
2600000000000000000000000);
INSERT INTO TRUCK_TYPE VALUES('B', 30000, 9000000);
INSERT INTO TRUCK_TYPE VALUES('C', 10000, 3000000);
INSERT INTO TRUCK_TYPE VALUES('D', 2000, 700000);
```

MAIL ROUTE

```
INSERT INTO MAIL_ROUTE VALUES(1);
INSERT INTO MAIL_ROUTE VALUES(2);
INSERT INTO MAIL_ROUTE VALUES(3);
INSERT INTO MAIL_ROUTE VALUES(4);
INSERT INTO MAIL_ROUTE VALUES(5);
INSERT INTO MAIL_ROUTE VALUES(6);
INSERT INTO MAIL_ROUTE VALUES(7);
INSERT INTO MAIL_ROUTE VALUES(8);
INSERT INTO MAIL_ROUTE VALUES(9);
INSERT INTO MAIL_ROUTE VALUES(10);
INSERT INTO MAIL_ROUTE VALUES(11);
INSERT INTO MAIL_ROUTE VALUES(12);
INSERT INTO MAIL_ROUTE VALUES(13);
INSERT INTO MAIL_ROUTE VALUES(14);
```

STOPS ON ROUTE

```
INSERT INTO STOPS_ON_ROUTE VALUES (1, 'S46146');
INSERT INTO STOPS_ON_ROUTE VALUES (1, 'S11424');
INSERT INTO STOPS_ON_ROUTE VALUES (1, 'S27252');
INSERT INTO STOPS_ON_ROUTE VALUES (2, 'S24982');
INSERT INTO STOPS_ON_ROUTE VALUES (2, 'S25352');
```

```
INSERT INTO STOPS_ON_ROUTE VALUES (2, 'S23457');
INSERT INTO STOPS_ON_ROUTE VALUES (2, 'S23252');
INSERT INTO STOPS_ON_ROUTE VALUES (3, 'S16578');
INSERT INTO STOPS_ON_ROUTE VALUES (3, 'S11525');
INSERT INTO STOPS_ON_ROUTE VALUES (3, 'S71525');
INSERT INTO STOPS_ON_ROUTE VALUES (3, 'S75524');
INSERT INTO STOPS_ON_ROUTE VALUES (4, 'S16578');
INSERT INTO STOPS_ON_ROUTE VALUES (4, 'S75127');
INSERT INTO STOPS_ON_ROUTE VALUES (4, 'S45827');
INSERT INTO STOPS_ON_ROUTE VALUES (5, 'S25837');
INSERT INTO STOPS_ON_ROUTE VALUES (5, 'S27887');
INSERT INTO STOPS_ON_ROUTE VALUES (5, 'S24097');
INSERT INTO STOPS_ON_ROUTE VALUES (6, 'S25837');
INSERT INTO STOPS_ON_ROUTE VALUES (6, 'S20097');
INSERT INTO STOPS_ON_ROUTE VALUES (6, 'S40097');
INSERT INTO STOPS_ON_ROUTE VALUES (6, 'S20143');
INSERT INTO STOPS_ON_ROUTE VALUES (7, 'S41572');
INSERT INTO STOPS_ON_ROUTE VALUES (7, 'S22124');
INSERT INTO STOPS_ON_ROUTE VALUES (7, 'S32724');
INSERT INTO STOPS_ON_ROUTE VALUES (7, 'S51249');
INSERT INTO STOPS_ON_ROUTE VALUES (7, 'S57549');
INSERT INTO STOPS_ON_ROUTE VALUES (7, 'S90519');
INSERT INTO STOPS_ON_ROUTE VALUES (8, 'S25837');
INSERT INTO STOPS_ON_ROUTE VALUES (8, 'S41572');
INSERT INTO STOPS_ON_ROUTE VALUES (9, 'S24982');
INSERT INTO STOPS_ON_ROUTE VALUES (9, 'S41572');
INSERT INTO STOPS_ON_ROUTE VALUES (10, 'S46146');
INSERT INTO STOPS_ON_ROUTE VALUES (10, 'S41572');
INSERT INTO STOPS_ON_ROUTE VALUES (11, 'S16578');
INSERT INTO STOPS_ON_ROUTE VALUES (11, 'S41572');
INSERT INTO STOPS_ON_ROUTE VALUES (12, 'S16578');
INSERT INTO STOPS_ON_ROUTE VALUES (12, 'S25837');
INSERT INTO STOPS_ON_ROUTE VALUES (13, 'S16578');
INSERT INTO STOPS_ON_ROUTE VALUES (13, 'S25837');
INSERT INTO STOPS_ON_ROUTE VALUES (14, 'S16578');
INSERT INTO STOPS_ON_ROUTE VALUES (14, 'S25837');
```

PACKAGE

```
INSERT INTO PACKAGE VALUES('PA1234','Box', 40.00, 30, 384, 'C45756', 'C42699');
INSERT INTO PACKAGE VALUES('PA4521','Envelope', 15.00, 10, 68, 'C03401','C45756');
INSERT INTO PACKAGE VALUES('PA9834','Postcard', 7.00, 2, 18, 'C41411','C13525');
INSERT INTO PACKAGE VALUES('PA5210','Envelope', 12.00, 11, 48, 'C63425','C13525');
INSERT INTO PACKAGE VALUES('PA7120','Postcard', 4.50, 3, 15, 'C63730', 'C52561');
INSERT INTO PACKAGE VALUES('PA2387','Box', 45.00, 35, 360, 'C90656', 'C87656');
INSERT INTO PACKAGE VALUES('PA5918','Box', 54.00, 42, 415, 'C87656', 'C45756');
INSERT INTO PACKAGE VALUES('PA9492','Envelope', 18.00, 12, 86, 'C15466', 'C45756');
INSERT INTO PACKAGE VALUES('PA0057','Postcard', 5.30, 6, 22, 'C42699', 'C15476');
INSERT INTO PACKAGE VALUES('PA2271','Postcard', 3.75, 4, 19, 'C38493', 'C86300');
INSERT INTO PACKAGE VALUES('PA4993','Box', 56.50, 38, 320, 'C86300', 'C26430');
INSERT INTO PACKAGE VALUES('PA5679','Envelope', 15.75, 11, 62, 'C26430', 'C26311');
INSERT INTO PACKAGE VALUES('PA8301','Envelope', 21.00, 9, 54, 'C26311', 'C24124');
INSERT INTO PACKAGE VALUES('PA3298','Postcard', 4.80, 3, 18, 'C24124', 'C24871');
INSERT INTO PACKAGE VALUES('PA9991','Box', 41.25, 30, 290, 'C90656', 'C15476');
INSERT INTO PACKAGE VALUES('PA8800','Envelope', 16.50, 10, 77, 'C15476', 'C63730');
INSERT INTO PACKAGE VALUES('PA7651','Postcard', 7.45, 2, 17, 'C03401', 'C41411');
INSERT INTO PACKAGE VALUES('PA1492','Postcard', 5.20, 4, 19, 'C90656', 'C45756');
```

TRUCK_CONTROL_PERIODS

```
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P21746','T12558','2016-09-10
09:10','2016-09-11 10:19');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P25986','T08679','2016-09-10
04:10','2016-09-12 20:11');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P12474','T12558','2016-09-12
19:14','2016-09-13 21:58');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P12574','T90826','2016-09-10
23:12','2016-09-13 07:11');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P06735','T12345','2016-09-11
12:50','2016-09-15 10:19');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P12474','T12345','2016-09-16
11:12','2016-09-18 12:11');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P25986','T03648','2016-09-11
05:22','2016-09-13 14:53');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P12574','T47683','2016-09-10
09:32','2016-09-11 14:11');
```

```
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P25986','T59237','2016-09-11
16:43','2016-09-14 06:50');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P06735','T03648','2016-09-15
04:13','2016-09-17 09:34');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P12574','T76415','2016-09-13
00:12','2016-09-15 10:11');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P25986','T24386','2016-09-15
11:46','2016-09-17 17:11');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P21746','T81653','2016-09-19
19:54','2016-09-21 11:30');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P06735','T92354','2016-09-18
15:24','2016-09-22 08:15');
INSERT INTO TRUCK_CONTROL_PERIOD VALUES('P12474','T34867','2016-09-15
16:56','2016-09-18 12:14');
```

DRIVE_TIME

```
INSERT INTO DRIVE_TIME VALUES('E22469','T12558','2016-09-10 09:10','2016-09-11
10:19');
INSERT INTO DRIVE_TIME VALUES('E03111','T08679','2016-09-10 04:10','2016-09-12
20:11');
INSERT INTO DRIVE_TIME VALUES('E83121','T12558','2016-09-12 19:14','2016-09-13
21:58');
INSERT INTO DRIVE_TIME VALUES('E92833','T90826','2016-09-10 23:12','2016-09-13
07:11');
INSERT INTO DRIVE_TIME VALUES('E74015','T12345','2016-09-11 12:50','2016-09-15
10:19');
INSERT INTO DRIVE_TIME VALUES('E77789','T12345','2016-09-16 11:12','2016-09-18
12:11');
INSERT INTO DRIVE_TIME VALUES('E21112','T03648','2016-09-11 05:22','2016-09-13
14:53');
INSERT INTO DRIVE_TIME VALUES('E55121','T47683','2016-09-10 09:32','2016-09-11
14:11');
INSERT INTO DRIVE_TIME VALUES('E21882','T59237','2016-09-11 16:43','2016-09-14
06:50');
INSERT INTO DRIVE_TIME VALUES('E77665','T03648','2016-09-15 04:13','2016-09-17
09:34');
INSERT INTO DRIVE_TIME VALUES('E21112','T76415','2016-09-13 15:12','2016-09-15
10:11');
```

```
INSERT INTO DRIVE_TIME VALUES('E22469','T24386','2016-09-15 11:46','2016-09-17
17:11');
INSERT INTO DRIVE_TIME VALUES('E77665','T81653','2016-09-19 19:54','2016-09-21
11:30');
INSERT INTO DRIVE_TIME VALUES('E21882','T92354','2016-09-18 15:24','2016-09-22
08:15');
INSERT INTO DRIVE_TIME VALUES('E21112','T34867','2016-09-15 16:56','2016-09-18
12:14');
```

DELIVERY_STOP

```
INSERT INTO DELIVERY_STOP VALUES ('S46146');
INSERT INTO DELIVERY_STOP VALUES ('S24982');
INSERT INTO DELIVERY_STOP VALUES ('S16578');
INSERT INTO DELIVERY_STOP VALUES ('S25837');
INSERT INTO DELIVERY_STOP VALUES ('S41572');
INSERT INTO DELIVERY_STOP VALUES ('S11424');
INSERT INTO DELIVERY_STOP VALUES ('S25352');
INSERT INTO DELIVERY_STOP VALUES ('S23457');
INSERT INTO DELIVERY_STOP VALUES ('S27252');
INSERT INTO DELIVERY_STOP VALUES ('S23252');
INSERT INTO DELIVERY_STOP VALUES ('S11525');
INSERT INTO DELIVERY_STOP VALUES ('S71525');
INSERT INTO DELIVERY_STOP VALUES ('S75524');
INSERT INTO DELIVERY_STOP VALUES ('S75127');
INSERT INTO DELIVERY_STOP VALUES ('S45827');
INSERT INTO DELIVERY_STOP VALUES ('S27887');
INSERT INTO DELIVERY_STOP VALUES ('S24097');
INSERT INTO DELIVERY_STOP VALUES ('S20097');
INSERT INTO DELIVERY_STOP VALUES ('S40097');
INSERT INTO DELIVERY_STOP VALUES ('S20143');
INSERT INTO DELIVERY_STOP VALUES ('S22124');
INSERT INTO DELIVERY_STOP VALUES ('S32724');
INSERT INTO DELIVERY_STOP VALUES ('S51249');
INSERT INTO DELIVERY_STOP VALUES ('S57549');
INSERT INTO DELIVERY_STOP VALUES ('S90519');
```

TRUCK_ROUTES_DRIVEN

```
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T12548','1');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T12345','3');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T98421','2');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T90826','4');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T08679','8');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T47683','6');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T59237','1');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T24386','3');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T34687','7');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T03648','5');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T42897','1');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T81653','1');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T97648','8');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T78865','6');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T76415','7');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T12934','2');
INSERT INTO TRUCK_ROUTES_DRIVEN VALUES ('T92354','3');
```

PACKAGE_ARRIVAL

```
INSERT INTO PACKAGE_ARRIVAL VALUES('PA1234','S41572','2016-09-10 08:31');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA1234','S20097','2016-09-11 18:15');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA4521','S24982','2016-09-10 17:29');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA4521','S41572','2016-09-11 12:28');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA4521','S27887','2016-09-16 08:35');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA9834','S24982','2016-09-12 14:19');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA9834','S46146','2016-09-13 13:24');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA9834','S27252','2016-09-20 14:21');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA5210','S24982','2016-09-14 08:47');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA5210','S46146','2016-09-20 13:57');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA5210','S27252','2016-09-20 15:38');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA7120','S16578','2016-09-12 14:11');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA7120','S71525','2016-09-13 11:01');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA2387','S16578','2016-09-12 15:01');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA2387','S75127','2016-09-13 14:14');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA5918','S16578','2016-09-14 11:46');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA5918','S41572','2016-09-15 17:42');
```

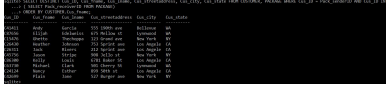
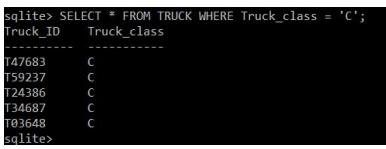
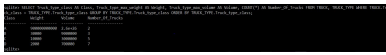
```
INSERT INTO PACKAGE_ARRIVAL VALUES('PA5918','S27887','2016-09-16 20:30');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA9492','S41572','2016-09-11 17:38');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA9492','S27887','2016-09-16 21:31');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA0057','S41572','2016-09-11 18:01');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA0057','S40097','2016-09-16 12:41');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA2271','S41572','2016-09-11 18:31');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA2271','S25837','2016-09-12 12:15');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA2271','S22124','2016-09-14 17:23');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA4993','S25837','2016-09-13 06:47');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA4993','S32724','2016-09-14 08:55');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA5679','S25837','2016-09-13 06:40');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA5679','S51249','2016-09-15 08:37');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA8301','S25837','2016-09-13 06:54');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA8301','S57549','2016-09-14 12:16');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA3298','S25837','2016-09-13 20:41');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA3298','S90519','2016-09-14 12:09');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA9991','S16578','2016-09-14 10:31');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA9991','S41572','2016-09-15 07:48');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA9991','S40097','2016-09-16 13:21');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA8800','S41572','2016-09-11 06:12');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA8800','S16578','2016-09-14 13:57');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA8800','S11525','2016-09-15 07:07');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA7651','S24982','2016-09-13 18:48');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA7651','S23457','2016-09-17 08:31');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA1492','S16578','2016-09-14 09:31');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA1492','S41572','2016-09-15 08:24');
INSERT INTO PACKAGE_ARRIVAL VALUES('PA1492','S27887','2016-09-16 17:50');
```

ENABLE FOREIGN KEYS

```
PRAGMA FOREIGN_KEYS=1;
```

FUNCTIONAL QUERIES

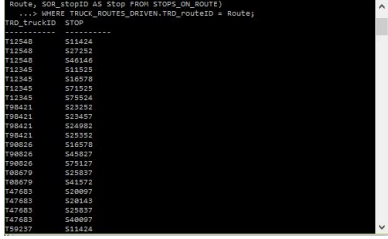
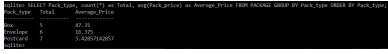

SQL Statement	Purpose	Output																																																																		
SELECT Cus_fname, Cus_lname, PO_ID FROM CUSTOMER INNER JOIN POST_OFFICE WHERE Cus_zip=PO_zip;	Show each customer name and the ID of their local post office.	<table><tr><th>Cus_fname</th><th>Cus_lname</th><th>PO_ID</th></tr><tr><td>Buster</td><td>Keaton</td><td>P21746</td></tr><tr><td>Gina</td><td>Smith</td><td>P12474</td></tr><tr><td>Andy</td><td>Garcia</td><td>P12474</td></tr><tr><td>Bill</td><td>Nye</td><td>P21746</td></tr><tr><td>Shane</td><td>Lol</td><td>P12474</td></tr><tr><td>Michael</td><td>Clark</td><td>P06735</td></tr><tr><td>Julie</td><td>Nonickel</td><td>P06735</td></tr><tr><td>Conor</td><td>Mark</td><td>P06735</td></tr><tr><td>Elijah</td><td>Edelweiss</td><td>P06735</td></tr><tr><td>Kim</td><td>Night</td><td>P06735</td></tr><tr><td>Jason</td><td>Stripe</td><td>P25986</td></tr><tr><td>Freddy</td><td>Nice</td><td>P25986</td></tr><tr><td>Plain</td><td>Jane</td><td>P25986</td></tr><tr><td>Ghetto</td><td>Thechoppa</td><td>P25986</td></tr><tr><td>Spring</td><td>Rolls</td><td>P25986</td></tr><tr><td>Kelly</td><td>Louis</td><td>P12574</td></tr><tr><td>Heather</td><td>Johnson</td><td>P12574</td></tr><tr><td>Jack</td><td>Rivers</td><td>P12574</td></tr><tr><td>Nancy</td><td>Esther</td><td>P12574</td></tr><tr><td>Jim</td><td>Drew</td><td>P12574</td></tr></table>	Cus_fname	Cus_lname	PO_ID	Buster	Keaton	P21746	Gina	Smith	P12474	Andy	Garcia	P12474	Bill	Nye	P21746	Shane	Lol	P12474	Michael	Clark	P06735	Julie	Nonickel	P06735	Conor	Mark	P06735	Elijah	Edelweiss	P06735	Kim	Night	P06735	Jason	Stripe	P25986	Freddy	Nice	P25986	Plain	Jane	P25986	Ghetto	Thechoppa	P25986	Spring	Rolls	P25986	Kelly	Louis	P12574	Heather	Johnson	P12574	Jack	Rivers	P12574	Nancy	Esther	P12574	Jim	Drew	P12574			
Cus_fname	Cus_lname	PO_ID																																																																		
Buster	Keaton	P21746																																																																		
Gina	Smith	P12474																																																																		
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Bill	Nye	P21746																																																																		
Shane	Lol	P12474																																																																		
Michael	Clark	P06735																																																																		
Julie	Nonickel	P06735																																																																		
Conor	Mark	P06735																																																																		
Elijah	Edelweiss	P06735																																																																		
Kim	Night	P06735																																																																		
Jason	Stripe	P25986																																																																		
Freddy	Nice	P25986																																																																		
Plain	Jane	P25986																																																																		
Ghetto	Thechoppa	P25986																																																																		
Spring	Rolls	P25986																																																																		
Kelly	Louis	P12574																																																																		
Heather	Johnson	P12574																																																																		
Jack	Rivers	P12574																																																																		
Nancy	Esther	P12574																																																																		
Jim	Drew	P12574																																																																		
SELECT Emp_fname, Emp_lname, PO_ID, PO_streetaddress, PO_city, PO_state, PO_zip FROM EMPLOYEE INNER JOIN POST_OFFICE WHERE Emp_ID=PO_supervisorid;	Find information about the post office each manager manages.	<table><tr><th>Emp_fname</th><th>Emp_lname</th><th>PO_ID</th><th>PO_streetaddress</th><th>PO_city</th><th>PO_state</th><th>PO_ZIP</th></tr><tr><td>Tom</td><td>Smith</td><td>P21746</td><td>12400 SE 38th St</td><td>Bellevue</td><td>WA</td><td>98006</td></tr><tr><td>Carrie</td><td>Fisher</td><td>P24734</td><td>13728 NE 8th St</td><td>Bellevue</td><td>WA</td><td>98006</td></tr><tr><td>Mary</td><td>Tom</td><td>P07255</td><td>3715 106th St SW</td><td>Lynnwood</td><td>WA</td><td>98036</td></tr><tr><td>Chae</td><td>Tom</td><td>P12574</td><td>1615 Wilcox Ave</td><td>Los Angeles</td><td>CA</td><td>90028</td></tr><tr><td>Tom</td><td>Smith</td><td>P25986</td><td>149 E 23rd St</td><td>New York</td><td>NY</td><td>10010</td></tr></table>	Emp_fname	Emp_lname	PO_ID	PO_streetaddress	PO_city	PO_state	PO_ZIP	Tom	Smith	P21746	12400 SE 38th St	Bellevue	WA	98006	Carrie	Fisher	P24734	13728 NE 8th St	Bellevue	WA	98006	Mary	Tom	P07255	3715 106th St SW	Lynnwood	WA	98036	Chae	Tom	P12574	1615 Wilcox Ave	Los Angeles	CA	90028	Tom	Smith	P25986	149 E 23rd St	New York	NY	10010																								
Emp_fname	Emp_lname	PO_ID	PO_streetaddress	PO_city	PO_state	PO_ZIP																																																														
Tom	Smith	P21746	12400 SE 38th St	Bellevue	WA	98006																																																														
Carrie	Fisher	P24734	13728 NE 8th St	Bellevue	WA	98006																																																														
Mary	Tom	P07255	3715 106th St SW	Lynnwood	WA	98036																																																														
Chae	Tom	P12574	1615 Wilcox Ave	Los Angeles	CA	90028																																																														
Tom	Smith	P25986	149 E 23rd St	New York	NY	10010																																																														
SELECT Emp_id, Emp_fname, Emp_lname, Emp_sex, Emp_DOB FROM EMPLOYEE, POST_OFFICE WHERE Emp_postofficeID = PO_ID AND PO_state = 'CA';	List employee information for all employees who work in a Post Office located in CA.	<table><tr><th>Emp_id</th><th>Emp_fname</th><th>Emp_lname</th><th>Emp_sex</th><th>Emp_DOB</th><th>Emp_postofficeID</th><th>PO_ID</th><th>PO_streetaddress</th><th>PO_city</th><th>PO_state</th><th>PO_ZIP</th></tr><tr><td>10001</td><td>Tom</td><td>Smith</td><td>M</td><td>1975-08-15</td><td>1</td><td>P21746</td><td>12400 SE 38th St</td><td>Bellevue</td><td>WA</td><td>98006</td></tr><tr><td>10002</td><td>Carrie</td><td>Fisher</td><td>F</td><td>1975-08-15</td><td>2</td><td>P24734</td><td>13728 NE 8th St</td><td>Bellevue</td><td>WA</td><td>98006</td></tr><tr><td>10003</td><td>Mary</td><td>Tom</td><td>F</td><td>1975-08-15</td><td>3</td><td>P07255</td><td>3715 106th St SW</td><td>Lynnwood</td><td>WA</td><td>98036</td></tr><tr><td>10004</td><td>Chae</td><td>Tom</td><td>M</td><td>1975-08-15</td><td>4</td><td>P12574</td><td>1615 Wilcox Ave</td><td>Los Angeles</td><td>CA</td><td>90028</td></tr><tr><td>10005</td><td>Tom</td><td>Smith</td><td>M</td><td>1975-08-15</td><td>5</td><td>P25986</td><td>149 E 23rd St</td><td>New York</td><td>NY</td><td>10010</td></tr></table>	Emp_id	Emp_fname	Emp_lname	Emp_sex	Emp_DOB	Emp_postofficeID	PO_ID	PO_streetaddress	PO_city	PO_state	PO_ZIP	10001	Tom	Smith	M	1975-08-15	1	P21746	12400 SE 38th St	Bellevue	WA	98006	10002	Carrie	Fisher	F	1975-08-15	2	P24734	13728 NE 8th St	Bellevue	WA	98006	10003	Mary	Tom	F	1975-08-15	3	P07255	3715 106th St SW	Lynnwood	WA	98036	10004	Chae	Tom	M	1975-08-15	4	P12574	1615 Wilcox Ave	Los Angeles	CA	90028	10005	Tom	Smith	M	1975-08-15	5	P25986	149 E 23rd St	New York	NY	10010
Emp_id	Emp_fname	Emp_lname	Emp_sex	Emp_DOB	Emp_postofficeID	PO_ID	PO_streetaddress	PO_city	PO_state	PO_ZIP																																																										
10001	Tom	Smith	M	1975-08-15	1	P21746	12400 SE 38th St	Bellevue	WA	98006																																																										
10002	Carrie	Fisher	F	1975-08-15	2	P24734	13728 NE 8th St	Bellevue	WA	98006																																																										
10003	Mary	Tom	F	1975-08-15	3	P07255	3715 106th St SW	Lynnwood	WA	98036																																																										
10004	Chae	Tom	M	1975-08-15	4	P12574	1615 Wilcox Ave	Los Angeles	CA	90028																																																										
10005	Tom	Smith	M	1975-08-15	5	P25986	149 E 23rd St	New York	NY	10010																																																										
SELECT * FROM CUSTOMER WHERE Cus_ZIP BETWEEN 90028 AND 98036;	List customer information for all customers who live on the West Coast (via Zip between 90028 and 98036).	<table><tr><th>Cus_ID</th><th>Cus_fname</th><th>Cus_lname</th><th>Cus_ZIP</th><th>Cus_streetaddress</th><th>Cus_city</th><th>Cus_state</th><th>Cus_ZIP</th><th>Cus_postofficeID</th><th>Cus_StreetID</th></tr><tr><td>10001</td><td>Tom</td><td>Smith</td><td>98006</td><td>12400 SE 38th St</td><td>Bellevue</td><td>WA</td><td>98006</td><td>1</td><td>12400 SE 38th St</td></tr><tr><td>10002</td><td>Carrie</td><td>Fisher</td><td>98006</td><td>13728 NE 8th St</td><td>Bellevue</td><td>WA</td><td>98006</td><td>2</td><td>13728 NE 8th St</td></tr><tr><td>10003</td><td>Mary</td><td>Tom</td><td>98036</td><td>3715 106th St SW</td><td>Lynnwood</td><td>WA</td><td>98036</td><td>3</td><td>3715 106th St SW</td></tr><tr><td>10004</td><td>Chae</td><td>Tom</td><td>90028</td><td>1615 Wilcox Ave</td><td>Los Angeles</td><td>CA</td><td>90028</td><td>4</td><td>1615 Wilcox Ave</td></tr><tr><td>10005</td><td>Tom</td><td>Smith</td><td>10010</td><td>149 E 23rd St</td><td>New York</td><td>NY</td><td>10010</td><td>5</td><td>149 E 23rd St</td></tr></table>	Cus_ID	Cus_fname	Cus_lname	Cus_ZIP	Cus_streetaddress	Cus_city	Cus_state	Cus_ZIP	Cus_postofficeID	Cus_StreetID	10001	Tom	Smith	98006	12400 SE 38th St	Bellevue	WA	98006	1	12400 SE 38th St	10002	Carrie	Fisher	98006	13728 NE 8th St	Bellevue	WA	98006	2	13728 NE 8th St	10003	Mary	Tom	98036	3715 106th St SW	Lynnwood	WA	98036	3	3715 106th St SW	10004	Chae	Tom	90028	1615 Wilcox Ave	Los Angeles	CA	90028	4	1615 Wilcox Ave	10005	Tom	Smith	10010	149 E 23rd St	New York	NY	10010	5	149 E 23rd St						
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10002	Carrie	Fisher	98006	13728 NE 8th St	Bellevue	WA	98006	2	13728 NE 8th St																																																											
10003	Mary	Tom	98036	3715 106th St SW	Lynnwood	WA	98036	3	3715 106th St SW																																																											
10004	Chae	Tom	90028	1615 Wilcox Ave	Los Angeles	CA	90028	4	1615 Wilcox Ave																																																											
10005	Tom	Smith	10010	149 E 23rd St	New York	NY	10010	5	149 E 23rd St																																																											

<pre>SELECT DISTINCT Cus_ID, Cus_fname, Cus_lname, Cus_streetaddress, Cus_city, Cus_state FROM CUSTOMER, PACKAGE WHERE Cus_ID = Pack_senderID AND Cus_ID IN (SELECT Pack_receiverID FROM PACKAGE) ORDER BY CUSTOMER.Cus_fname;</pre>	<p>List the ID, full name, and full addresses of all customers who have both sent and received a package. Sort by the first name of the customer.</p>	
<pre>SELECT * FROM TRUCK WHERE Truck_class = 'C';</pre>	<p>List all truck information (Truck ID) that belongs to class 'C'.</p>	
<pre>SELECT Truck_type_class AS Class, Truck_type_max_weight AS Weight, Truck_type_max_volume AS Volume, COUNT(*) AS Number_Of_Trucks FROM TRUCK, TRUCK_TYPE WHERE TRUCK.Truck_class = TRUCK_TYPE.Truck_type_ class GROUP BY TRUCK_TYPE.Truck_type_ class ORDER BY TRUCK_TYPE.Truck_type_ class;</pre>	<p>List all the information for each Truck type: including: the class, max weight, max volume, and number of trucks with that type. This information is grouped and ordered by Truck class.</p>	

<pre>SELECT Emp_fname, Emp_lname, DT_driverID, DT_truckID, DT_startdate_time, DT_enddate_time FROM EMPLOYEE, DRIVE_TIME WHERE DT_startdate_time >= '2016-09-10' and DT_startdate_time < '2016-09-11' AND DRIVE_TIME.DT_driverID = EMPLOYEE.Emp_ID ORDER BY Emp_fname;</pre>	<p>List the Employee name, number, truck ID, and time for all Driving times/sessions that started on September 10th, 2016.</p>	<table><tr><th>Emp_fname</th><th>Emp_lname</th><th>DT_driverID</th><th>DT_truckID</th><th>DT_startdate_time</th><th>DT_enddate_time</th></tr><tr><td>Don</td><td>Mount</td><td>E92833</td><td>T98826</td><td>2016-09-10 23:12</td><td>2016-09-11 07:11</td></tr><tr><td>Ken</td><td>Jon</td><td>E22469</td><td>T12558</td><td>2016-09-10 09:10</td><td>2016-09-11 10:10</td></tr><tr><td>Ken</td><td>Vogari</td><td>E01111</td><td>T00679</td><td>2016-09-10 04:10</td><td>2016-09-12 20:11</td></tr><tr><td>Curroy</td><td>Jonkins</td><td>E55121</td><td>T47081</td><td>2016-09-10 09:12</td><td>2016-09-11 14:11</td></tr><tr><td>Salito</td><td></td><td></td><td></td><td></td><td></td></tr></table>	Emp_fname	Emp_lname	DT_driverID	DT_truckID	DT_startdate_time	DT_enddate_time	Don	Mount	E92833	T98826	2016-09-10 23:12	2016-09-11 07:11	Ken	Jon	E22469	T12558	2016-09-10 09:10	2016-09-11 10:10	Ken	Vogari	E01111	T00679	2016-09-10 04:10	2016-09-12 20:11	Curroy	Jonkins	E55121	T47081	2016-09-10 09:12	2016-09-11 14:11	Salito																																																																																																																																																					
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<pre>SELECT Pack_id, c1.Cus_streetaddress From_street, c1.Cus_city From_city, c1.Cus_state From_state, c1.Cus_zip From_zip, c2.Cus_streetaddress To_street, c2.Cus_city To_city, c2.Cus_state To_state, c2.Cus_zip To_zip FROM PACKAGE, CUSTOMER c1, CUSTOMER c2, POST_OFFICE p1, POST_OFFICE p2 where Pack_senderID=c1.Cus_ID and Pack_receiverID=c2.Cus_ID and c1.Cus_zip=p1.PO_ZIP and c2.Cus_zip=p2.PO_ZIP;</pre>	<p>List each the sender’s address and receiver’s address for a package.</p>	<table><tr><th>Pack_ID</th><th>From_street</th><th>From_city</th><th>From_state</th><th>From_zip</th><th>To_street</th><th>To_city</th><th>To_state</th><th>To_zip</th></tr><tr><td>Pack24</td><td>988 Jello st</td><td>New York</td><td>NY</td><td>10019</td><td>527 Burger ave</td><td>New York</td><td>NY</td><td>10019</td></tr><tr><td>Pack25</td><td>443 1210 av</td><td>Bellmore</td><td>WA</td><td>98009</td><td>989 261 st</td><td>New York</td><td>NY</td><td>10019</td></tr><tr><td>Pack26</td><td>535 124th av</td><td>Bellmore</td><td>WA</td><td>98009</td><td>533 1st st</td><td>Bellmore</td><td>WA</td><td>98005</td></tr><tr><td>Pack27</td><td>455 1st st</td><td>Bellmore</td><td>WA</td><td>98009</td><td>535 1st st</td><td>Bellmore</td><td>WA</td><td>98005</td></tr><tr><td>Pack28</td><td>581 Cherry st</td><td>Lynnwood</td><td>WA</td><td>98036</td><td>288 7th ave</td><td>Lynnwood</td><td>WA</td><td>98036</td></tr><tr><td>Pack29</td><td>985 W ave</td><td>Lynnwood</td><td>WA</td><td>98034</td><td>470 Melrose st</td><td>Lynnwood</td><td>WA</td><td>98036</td></tr><tr><td>Pack30</td><td>455 Melrose</td><td>Lynnwood</td><td>WA</td><td>98036</td><td>989 261 st</td><td>New York</td><td>NY</td><td>10019</td></tr><tr><td>Pack31</td><td>527 Rutherford</td><td>New York</td><td>NY</td><td>10019</td><td>989 261 st</td><td>New York</td><td>NY</td><td>10019</td></tr><tr><td>Pack32</td><td>527 Rutherford</td><td>New York</td><td>NY</td><td>10019</td><td>989 261 st</td><td>New York</td><td>NY</td><td>10019</td></tr><tr><td>Pack33</td><td>750 P st</td><td>New York</td><td>NY</td><td>10019</td><td>6788 Bremer st</td><td>Los Angeles</td><td>CA</td><td>90028</td></tr><tr><td>Pack34</td><td>6788 Bremer st</td><td>Los Angeles</td><td>CA</td><td>90028</td><td>750 Spruit ave</td><td>Los Angeles</td><td>CA</td><td>90028</td></tr><tr><td>Pack35</td><td>750 Spruit ave</td><td>Los Angeles</td><td>CA</td><td>90028</td><td>252 Spruit ave</td><td>Los Angeles</td><td>CA</td><td>90028</td></tr><tr><td>Pack36</td><td>252 Spruit ave</td><td>Los Angeles</td><td>CA</td><td>90028</td><td>899 38th st</td><td>Los Angeles</td><td>CA</td><td>90028</td></tr><tr><td>Pack37</td><td>899 38th st</td><td>Los Angeles</td><td>CA</td><td>90028</td><td>145 51st st</td><td>Los Angeles</td><td>CA</td><td>90028</td></tr><tr><td>Pack38</td><td>145 51st st</td><td>Los Angeles</td><td>CA</td><td>90028</td><td>123 Grand ave</td><td>New York</td><td>NY</td><td>10019</td></tr><tr><td>Pack39</td><td>123 Grand ave</td><td>New York</td><td>NY</td><td>10019</td><td>545 Cherry st</td><td>Lynnwood</td><td>WA</td><td>98036</td></tr><tr><td>Pack40</td><td>545 Cherry st</td><td>Lynnwood</td><td>WA</td><td>98036</td><td>525 1st ave</td><td>Bellmore</td><td>WA</td><td>98005</td></tr><tr><td>Pack41</td><td>525 1st ave</td><td>Bellmore</td><td>WA</td><td>98005</td><td>989 261 st</td><td>New York</td><td>NY</td><td>10019</td></tr><tr><td>Pack42</td><td>989 261 st</td><td>New York</td><td>NY</td><td>10019</td><td>989 261 st</td><td>New York</td><td>NY</td><td>10019</td></tr></table>	Pack_ID	From_street	From_city	From_state	From_zip	To_street	To_city	To_state	To_zip	Pack24	988 Jello st	New York	NY	10019	527 Burger ave	New York	NY	10019	Pack25	443 1210 av	Bellmore	WA	98009	989 261 st	New York	NY	10019	Pack26	535 124th av	Bellmore	WA	98009	533 1st st	Bellmore	WA	98005	Pack27	455 1st st	Bellmore	WA	98009	535 1st st	Bellmore	WA	98005	Pack28	581 Cherry st	Lynnwood	WA	98036	288 7th ave	Lynnwood	WA	98036	Pack29	985 W ave	Lynnwood	WA	98034	470 Melrose st	Lynnwood	WA	98036	Pack30	455 Melrose	Lynnwood	WA	98036	989 261 st	New York	NY	10019	Pack31	527 Rutherford	New York	NY	10019	989 261 st	New York	NY	10019	Pack32	527 Rutherford	New York	NY	10019	989 261 st	New York	NY	10019	Pack33	750 P st	New York	NY	10019	6788 Bremer st	Los Angeles	CA	90028	Pack34	6788 Bremer st	Los Angeles	CA	90028	750 Spruit ave	Los Angeles	CA	90028	Pack35	750 Spruit ave	Los Angeles	CA	90028	252 Spruit ave	Los Angeles	CA	90028	Pack36	252 Spruit ave	Los Angeles	CA	90028	899 38th st	Los Angeles	CA	90028	Pack37	899 38th st	Los Angeles	CA	90028	145 51st st	Los Angeles	CA	90028	Pack38	145 51st st	Los Angeles	CA	90028	123 Grand ave	New York	NY	10019	Pack39	123 Grand ave	New York	NY	10019	545 Cherry st	Lynnwood	WA	98036	Pack40	545 Cherry st	Lynnwood	WA	98036	525 1st ave	Bellmore	WA	98005	Pack41	525 1st ave	Bellmore	WA	98005	989 261 st	New York	NY	10019	Pack42	989 261 st	New York	NY	10019	989 261 st	New York	NY	10019
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Pack28	581 Cherry st	Lynnwood	WA	98036	288 7th ave	Lynnwood	WA	98036																																																																																																																																																																														
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Pack30	455 Melrose	Lynnwood	WA	98036	989 261 st	New York	NY	10019																																																																																																																																																																														
Pack31	527 Rutherford	New York	NY	10019	989 261 st	New York	NY	10019																																																																																																																																																																														
Pack32	527 Rutherford	New York	NY	10019	989 261 st	New York	NY	10019																																																																																																																																																																														
Pack33	750 P st	New York	NY	10019	6788 Bremer st	Los Angeles	CA	90028																																																																																																																																																																														
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Pack35	750 Spruit ave	Los Angeles	CA	90028	252 Spruit ave	Los Angeles	CA	90028																																																																																																																																																																														
Pack36	252 Spruit ave	Los Angeles	CA	90028	899 38th st	Los Angeles	CA	90028																																																																																																																																																																														
Pack37	899 38th st	Los Angeles	CA	90028	145 51st st	Los Angeles	CA	90028																																																																																																																																																																														
Pack38	145 51st st	Los Angeles	CA	90028	123 Grand ave	New York	NY	10019																																																																																																																																																																														
Pack39	123 Grand ave	New York	NY	10019	545 Cherry st	Lynnwood	WA	98036																																																																																																																																																																														
Pack40	545 Cherry st	Lynnwood	WA	98036	525 1st ave	Bellmore	WA	98005																																																																																																																																																																														
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Pack42	989 261 st	New York	NY	10019	989 261 st	New York	NY	10019																																																																																																																																																																														

<pre>SELECT Pack_id, p1.PO_stopID From_PO_Stop, p2.PO_stopID To_PO_Stop, c2.Cus_stopID To_Stop FROM PACKAGE, CUSTOMER c1, CUSTOMER c2, POST_OFFICE p1, POST_OFFICE p2 where Pack_senderID=c1.Cus_ID and Pack_receiverID=c2.Cus_ID and c1.Cus_zip=p1.PO_ZIP and c2.Cus_zip=p2.PO_ZIP;</pre>	<p>List the stops a package hits when travelling from sender to receiver.</p>	<table><tr><th>Pack_ID</th><th>From_PO_Stop</th><th>To_PO_Stop</th><th>To_Stop</th></tr><tr><td>PA1234</td><td>S41572</td><td>S41572</td><td>S20097</td></tr><tr><td>PA4521</td><td>S24982</td><td>S41572</td><td>S27887</td></tr><tr><td>PA9834</td><td>S24982</td><td>S46146</td><td>S27252</td></tr><tr><td>PA5210</td><td>S24982</td><td>S46146</td><td>S27252</td></tr><tr><td>PA7120</td><td>S16578</td><td>S16578</td><td>S71525</td></tr><tr><td>PA2387</td><td>S16578</td><td>S16578</td><td>S75127</td></tr><tr><td>PA5918</td><td>S16578</td><td>S41572</td><td>S27887</td></tr><tr><td>PA9492</td><td>S41572</td><td>S41572</td><td>S27887</td></tr><tr><td>PA0057</td><td>S41572</td><td>S41572</td><td>S40097</td></tr><tr><td>PA2271</td><td>S41572</td><td>S25837</td><td>S22124</td></tr><tr><td>PA4993</td><td>S25837</td><td>S25837</td><td>S32724</td></tr><tr><td>PA5679</td><td>S25837</td><td>S25837</td><td>S51249</td></tr><tr><td>PA8301</td><td>S25837</td><td>S25837</td><td>S57549</td></tr><tr><td>PA3298</td><td>S25837</td><td>S25837</td><td>S90519</td></tr><tr><td>PA9991</td><td>S16578</td><td>S41572</td><td>S40097</td></tr><tr><td>PA8800</td><td>S41572</td><td>S16578</td><td>S11525</td></tr><tr><td>PA7651</td><td>S24982</td><td>S24982</td><td>S23457</td></tr><tr><td>PA1492</td><td>S16578</td><td>S41572</td><td>S27887</td></tr></table>	Pack_ID	From_PO_Stop	To_PO_Stop	To_Stop	PA1234	S41572	S41572	S20097	PA4521	S24982	S41572	S27887	PA9834	S24982	S46146	S27252	PA5210	S24982	S46146	S27252	PA7120	S16578	S16578	S71525	PA2387	S16578	S16578	S75127	PA5918	S16578	S41572	S27887	PA9492	S41572	S41572	S27887	PA0057	S41572	S41572	S40097	PA2271	S41572	S25837	S22124	PA4993	S25837	S25837	S32724	PA5679	S25837	S25837	S51249	PA8301	S25837	S25837	S57549	PA3298	S25837	S25837	S90519	PA9991	S16578	S41572	S40097	PA8800	S41572	S16578	S11525	PA7651	S24982	S24982	S23457	PA1492	S16578	S41572	S27887
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PA7120	S16578	S16578	S71525																																																																											
PA2387	S16578	S16578	S75127																																																																											
PA5918	S16578	S41572	S27887																																																																											
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PA2271	S41572	S25837	S22124																																																																											
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PA7651	S24982	S24982	S23457																																																																											
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<pre>SELECT DT_truckID, DT_startdate_time, DT_enddate_time FROM DRIVE_TIME, TRUCK, POST_OFFICE, DELIVERY_STOP, TRUCK_CONTROL_PERIO D WHERE Stop_ID='S16578' AND PO_stopID=Stop_ID AND TCP_officenum=PO_ID AND DT_truckID=TCP_truckID GROUP BY DT_startdate_time;</pre>	<p>List the start and end times when a truck is servicing the post office with stop ID S16578.</p>	<table><tr><th>DT_truckID</th><th>DT_startdate_time</th><th>DT_enddate_time</th></tr><tr><td>T03648</td><td>2016-09-11 05:22</td><td>2016-09-13 14:53</td></tr><tr><td>T12345</td><td>2016-09-11 12:50</td><td>2016-09-15 10:19</td></tr><tr><td>T03648</td><td>2016-09-15 04:13</td><td>2016-09-17 09:34</td></tr><tr><td>T12345</td><td>2016-09-16 11:12</td><td>2016-09-18 12:11</td></tr><tr><td>T92354</td><td>2016-09-18 15:24</td><td>2016-09-22 08:15</td></tr></table>	DT_truckID	DT_startdate_time	DT_enddate_time	T03648	2016-09-11 05:22	2016-09-13 14:53	T12345	2016-09-11 12:50	2016-09-15 10:19	T03648	2016-09-15 04:13	2016-09-17 09:34	T12345	2016-09-16 11:12	2016-09-18 12:11	T92354	2016-09-18 15:24	2016-09-22 08:15																																																										
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<pre>SELECT DT_startdate_time, DT_enddate_time FROM CUSTOMER, DRIVE_TIME, TRUCK, POST_OFFICE, DELIVERY_STOP, TRUCK_CONTROL_PERIOD WHERE Cus_stopID='S51249' AND Cus_zip=PO_ZIP AND PO_stopID=Stop_ID AND TCP_officenum=PO_ID AND DT_truckID=TCP_truckID GROUP BY DT_startdate_time;</pre>	List the start and end times when a truck could service the customer with stop ID S51249.	<table><tr><th>DT_startdate_time</th><th>DT_enddate_time</th></tr><tr><td>2016-09-10 09:32</td><td>2016-09-11 14:11</td></tr><tr><td>2016-09-10 23:12</td><td>2016-09-13 07:11</td></tr><tr><td>2016-09-13 15:12</td><td>2016-09-15 10:11</td></tr></table>	DT_startdate_time	DT_enddate_time	2016-09-10 09:32	2016-09-11 14:11	2016-09-10 23:12	2016-09-13 07:11	2016-09-13 15:12	2016-09-15 10:11																																																																				
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<pre>SELECT TCP_officenum Controlling_PO, DT_truckID Truck_ID, DT_startdate_time Start_time, DT_enddate_time End_time FROM DRIVE_TIME, TRUCK_CONTROL_PERIOD D where DT_startdate_time >= '2016-09-11' and DT_startdate_time < '2016-09-12' and DT_truckID=TCP_truckID and TCP_startdate_time <= DT_startdate_time and TCP_enddate_time >= DT_enddate_time;</pre>	List information about all trucks which started driving on 9/11.	<table><tr><th>Controlling_PO</th><th>Truck_ID</th><th>Start_time</th><th>End_time</th></tr><tr><td>P06735</td><td>T12345</td><td>2016-09-11 12:50</td><td>2016-09-15 10:19</td></tr><tr><td>P25986</td><td>T03648</td><td>2016-09-11 05:22</td><td>2016-09-13 14:53</td></tr><tr><td>P25986</td><td>T59237</td><td>2016-09-11 16:43</td><td>2016-09-14 06:50</td></tr></table>	Controlling_PO	Truck_ID	Start_time	End_time	P06735	T12345	2016-09-11 12:50	2016-09-15 10:19	P25986	T03648	2016-09-11 05:22	2016-09-13 14:53	P25986	T59237	2016-09-11 16:43	2016-09-14 06:50																																																												
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<pre>SELECT PA_packageID Package_id, COUNT(*) Num_stops, MIN(PA_arrivaldate_time) Pickup_date, MAX(PA_arrivaldate_time) Delivery_date FROM PACKAGE_ARRIVAL GROUP BY PA_packageID;</pre>	List how many stops a package made along with the pickup date and delivery date.	<table><tr><th>Package_id</th><th>Num_stops</th><th>Pickup_date</th><th>Delivery_date</th></tr><tr><td>PA0057</td><td>2</td><td>2016-09-11 18:01</td><td>2016-09-16 12:41</td></tr><tr><td>PA1234</td><td>2</td><td>2016-09-10 08:31</td><td>2016-09-11 18:15</td></tr><tr><td>PA1492</td><td>3</td><td>2016-09-14 09:31</td><td>2016-09-16 17:50</td></tr><tr><td>PA2271</td><td>3</td><td>2016-09-11 18:31</td><td>2016-09-14 17:23</td></tr><tr><td>PA2387</td><td>2</td><td>2016-09-12 15:01</td><td>2016-09-13 14:14</td></tr><tr><td>PA3298</td><td>2</td><td>2016-09-13 20:41</td><td>2016-09-14 12:09</td></tr><tr><td>PA4521</td><td>3</td><td>2016-09-10 17:29</td><td>2016-09-16 08:35</td></tr><tr><td>PA4993</td><td>2</td><td>2016-09-13 06:47</td><td>2016-09-14 08:55</td></tr><tr><td>PA5210</td><td>3</td><td>2016-09-14 08:47</td><td>2016-09-20 15:38</td></tr><tr><td>PA5679</td><td>2</td><td>2016-09-13 06:48</td><td>2016-09-15 08:37</td></tr><tr><td>PA5915</td><td>3</td><td>2016-09-14 11:46</td><td>2016-09-16 20:30</td></tr><tr><td>PA7120</td><td>2</td><td>2016-09-12 14:11</td><td>2016-09-13 11:01</td></tr><tr><td>PA7651</td><td>2</td><td>2016-09-13 18:48</td><td>2016-09-17 08:31</td></tr><tr><td>PA8301</td><td>2</td><td>2016-09-13 06:54</td><td>2016-09-14 12:16</td></tr><tr><td>PA8800</td><td>3</td><td>2016-09-11 06:12</td><td>2016-09-15 07:07</td></tr><tr><td>PA9492</td><td>2</td><td>2016-09-11 17:38</td><td>2016-09-16 21:31</td></tr><tr><td>PA9834</td><td>3</td><td>2016-09-12 14:19</td><td>2016-09-20 14:21</td></tr><tr><td>PA9991</td><td>3</td><td>2016-09-14 10:31</td><td>2016-09-16 13:21</td></tr></table>	Package_id	Num_stops	Pickup_date	Delivery_date	PA0057	2	2016-09-11 18:01	2016-09-16 12:41	PA1234	2	2016-09-10 08:31	2016-09-11 18:15	PA1492	3	2016-09-14 09:31	2016-09-16 17:50	PA2271	3	2016-09-11 18:31	2016-09-14 17:23	PA2387	2	2016-09-12 15:01	2016-09-13 14:14	PA3298	2	2016-09-13 20:41	2016-09-14 12:09	PA4521	3	2016-09-10 17:29	2016-09-16 08:35	PA4993	2	2016-09-13 06:47	2016-09-14 08:55	PA5210	3	2016-09-14 08:47	2016-09-20 15:38	PA5679	2	2016-09-13 06:48	2016-09-15 08:37	PA5915	3	2016-09-14 11:46	2016-09-16 20:30	PA7120	2	2016-09-12 14:11	2016-09-13 11:01	PA7651	2	2016-09-13 18:48	2016-09-17 08:31	PA8301	2	2016-09-13 06:54	2016-09-14 12:16	PA8800	3	2016-09-11 06:12	2016-09-15 07:07	PA9492	2	2016-09-11 17:38	2016-09-16 21:31	PA9834	3	2016-09-12 14:19	2016-09-20 14:21	PA9991	3	2016-09-14 10:31	2016-09-16 13:21
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<pre>SELECT TRD_truckID,STOP FROM TRUCK_ROUTES_DRIVEN , (SELECT SOR_routeID AS Route, SOR_stopID AS Stop FROM STOPS_ON_ROUTE) WHERE TRUCK_ROUTES_DRIVEN .TRD_routeID = Route ORDER BY TRD_truckID;</pre>	Showing the stops on each route for each truck that has taken that route.	
<pre>SELECT Pack_type, count(*) as Total, avg(Pack_price) as Average_Price FROM PACKAGE GROUP BY Pack_type ORDER BY Pack_type;</pre>	Show the average price and total number of each package type ('Box', 'Package', 'Postcard').	
<pre>SELECT e.Emp_fname, e.Emp_lname, m.Emp_fname Mgr_fname, m.Emp_lname Mgr_lname FROM EMPLOYEE e, EMPLOYEE m WHERE e.Emp_managerid=m.Emp_I D;</pre>	Find information about the manager of each employee.	
<pre>UPDATE PACKAGE SET Pack_weight=54 WHERE Pack_ID='PA2387';</pre>	Update weight to 54 for Package PA2387.	N/A
<pre>UPDATE TRUCK SET Truck_id = 'T11245' WHERE Truck_id = 'T12345';</pre>	Update ID to T11245 for Truck T12345.	N/A
<pre>DELETE FROM DELIVERY_STOP WHERE Stop_ID=(SELECT Cus_stopID FROM CUSTOMER WHERE Cus_ID='C52561');</pre>	Delete the stop for the house where Customer C52561 lives.	N/A

DELETE FROM EMPLOYEE WHERE Emp_ID = 'E99612';	Delete Employee with Emp_ID = 'E99612'.	N/A
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