

Course: CSGY-6083-Principles of Database Systems

Section: B

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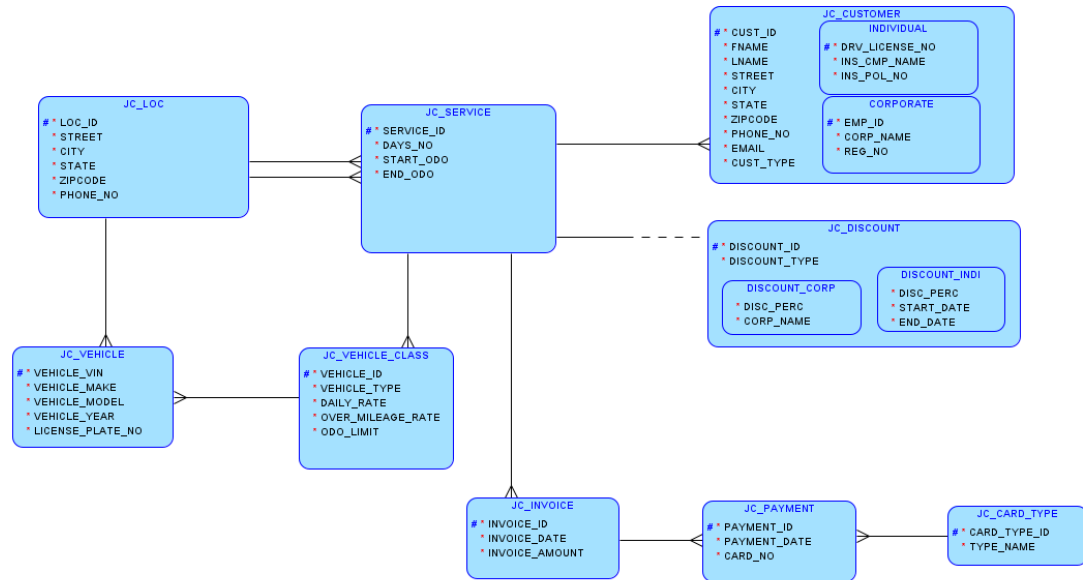
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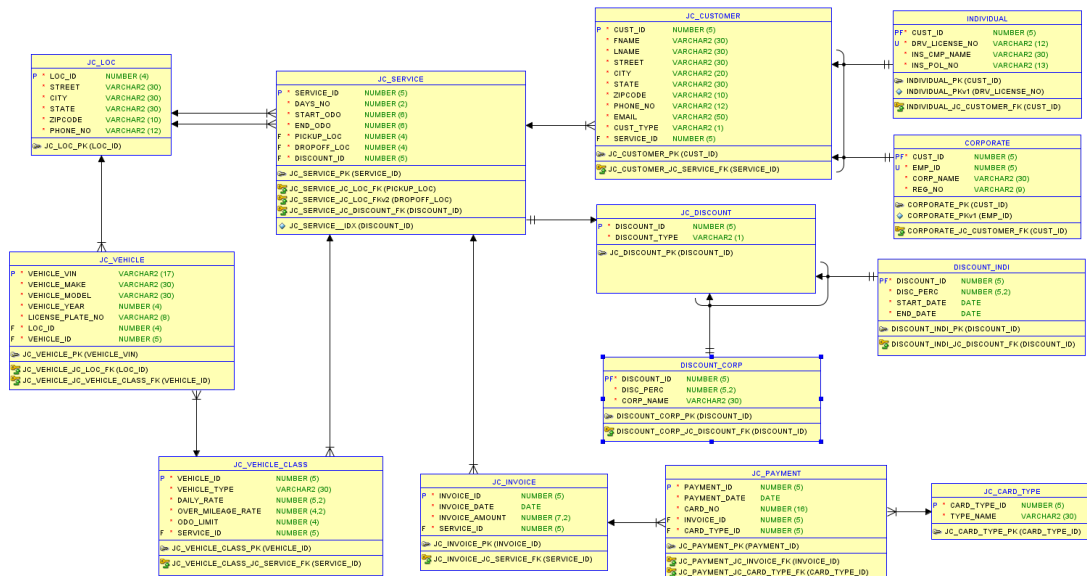
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a) Logical E-R Model



b) Relational Model



c) Assumptions

1. The Employee ID of the customer and the registration number of the corporation are both unique within a corporate account.
2. The driver license number of the customer is also unique within an individual account.
3. Discounts, whether individual or corporate, are applied manually by the staff at the time of renting a vehicle. Because the business case doesn't specify an automated system for applying discounts; hence, it's assumed that staff handles this process.
4. All individual customers are required to provide their own insurance information since the business case mentions that WOW does not provide vehicle insurance to individual customers, implying that customers need to have their own insurance.

d) DDL Code

```
-- Generated by Oracle SQL Developer Data Modeler 23.1.0.087.0806
-- at:      2023-11-12 16:52:21 EST
-- site:    Oracle Database 11g
-- type:    Oracle Database 11g

-- predefined type, no DDL - MDSYS.SDO_GEOMETRY

-- predefined type, no DDL - XMLTYPE

CREATE TABLE corporate (
  -- customer id
  cust_id  NUMBER(5) NOT NULL,
  -- Employee ID of the customer who rents the car on a corporate account
  emp_id   NUMBER(5) NOT NULL,
  -- details of corporation name
  corp_name VARCHAR2(30) NOT NULL,
  -- registration number of the corporation
  reg_no   VARCHAR2(9) NOT NULL
);

COMMENT ON COLUMN corporate.cust_id IS
```

```
'customer id';

COMMENT ON COLUMN corporate.emp_id IS
    'Employee ID of the customer who rents the car on a corporate account';

COMMENT ON COLUMN corporate.corp_name IS
    'details of corporation name';

COMMENT ON COLUMN corporate.reg_no IS
    'registration number of the corporation';

ALTER TABLE corporate ADD CONSTRAINT corporate_pk PRIMARY KEY
( cust_id );

ALTER TABLE corporate ADD CONSTRAINT corporate_pkv1 UNIQUE
( emp_id );

CREATE TABLE discount_corp (
-- discount id
    discount_id NUMBER(5) NOT NULL,
-- percentage of discount offered for corporation
    disc_perc  NUMBER(5, 2) NOT NULL,
-- corporation name
    corp_name  VARCHAR2(30) NOT NULL
);

COMMENT ON COLUMN discount_corp.discount_id IS
    'discount id';

COMMENT ON COLUMN discount_corp.disc_perc IS
    'percentage of discount offered for corporation';

COMMENT ON COLUMN discount_corp.corp_name IS
    'corporation name';

ALTER TABLE discount_corp ADD CONSTRAINT discount_corp_pk PRIMARY
KEY ( discount_id );
```

```
CREATE TABLE discount_indi (  
  -- discount id  
  discount_id NUMBER(5) NOT NULL,  
  -- percentage of discount offered for individual  
  disc_perc  NUMBER(5, 2) NOT NULL,  
  -- discount coupon start date  
  start_date DATE NOT NULL,  
  -- discount coupon end date  
  end_date   DATE NOT NULL  
);  
  
COMMENT ON COLUMN discount_indi.discount_id IS  
  'discount id';  
  
COMMENT ON COLUMN discount_indi.disc_perc IS  
  'percentage of discount offered for individual';  
  
COMMENT ON COLUMN discount_indi.start_date IS  
  'discount coupon start date';  
  
COMMENT ON COLUMN discount_indi.end_date IS  
  'discount coupon end date';  
  
ALTER TABLE discount_indi ADD CONSTRAINT discount_indi_pk PRIMARY  
KEY ( discount_id );  
  
CREATE TABLE individual (  
  -- customer id  
  cust_id      NUMBER(5) NOT NULL,  
  -- Driver License Number  
  drv_license_no VARCHAR2(12) NOT NULL,  
  -- Insurance Company Name  
  ins_cmp_name  VARCHAR2(30) NOT NULL,  
  -- Insurance Policy Number  
  ins_pol_no    VARCHAR2(13) NOT NULL  
);  
  
COMMENT ON COLUMN individual.cust_id IS
```

```

'customer id';

COMMENT ON COLUMN individual.drv_license_no IS
'Driver License Number';

COMMENT ON COLUMN individual.ins_cmp_name IS
'Insurance Company Name';

COMMENT ON COLUMN individual.ins_pol_no IS
'Insurance Policy Number';

ALTER TABLE individual ADD CONSTRAINT individual_pk PRIMARY KEY
( cust_id );

ALTER TABLE individual ADD CONSTRAINT individual_pkv1 UNIQUE
( drv_license_no );

CREATE TABLE jc_card_type (
-- CARD TYPE ID
card_type_id NUMBER(5) NOT NULL,
-- card type name
type_name VARCHAR2(30) NOT NULL
);

COMMENT ON COLUMN jc_card_type.card_type_id IS
'CARD TYPE ID';

COMMENT ON COLUMN jc_card_type.type_name IS
'card type name';

ALTER TABLE jc_card_type ADD CONSTRAINT jc_card_type_pk PRIMARY
KEY ( card_type_id );

CREATE TABLE jc_customer (
-- customer id
cust_id NUMBER(5) NOT NULL,
-- customer first name
fname VARCHAR2(30) NOT NULL,

```

```

-- customer last name
lname    VARCHAR2(30) NOT NULL,
-- customer street
street   VARCHAR2(30) NOT NULL,
-- customer city
city     VARCHAR2(20) NOT NULL,
-- customer state
state    VARCHAR2(30) NOT NULL,
-- customer zipcode
zipcode  VARCHAR2(10) NOT NULL,
-- customer phone number
phone_no VARCHAR2(12) NOT NULL,
-- customer email
email    VARCHAR2(50) NOT NULL,
-- customer type
cust_type VARCHAR2(1) NOT NULL,
-- service_id
service_id NUMBER(5) NOT NULL
);

ALTER TABLE jc_customer
  ADD CONSTRAINT ch_inh_jc_customer CHECK ( cust_type IN ( 'C', 'T' ) );

COMMENT ON COLUMN jc_customer.cust_id IS
  'customer id';

COMMENT ON COLUMN jc_customer.fname IS
  'customer first name';

COMMENT ON COLUMN jc_customer.lname IS
  'customer last name';

COMMENT ON COLUMN jc_customer.street IS
  'customer street';

COMMENT ON COLUMN jc_customer.city IS
  'customer city';

```



```
COMMENT ON COLUMN jc_customer.state IS
    'customer state';

COMMENT ON COLUMN jc_customer.zipcode IS
    'customer zipcode';

COMMENT ON COLUMN jc_customer.phone_no IS
    'customer phone number';

COMMENT ON COLUMN jc_customer.email IS
    'customer email';

COMMENT ON COLUMN jc_customer.cust_type IS
    'customer type';

COMMENT ON COLUMN jc_customer.service_id IS
    'service_id';

ALTER TABLE jc_customer ADD CONSTRAINT jc_customer_pk PRIMARY KEY
( cust_id );

CREATE TABLE jc_discount (
    -- discount id
    discount_id    NUMBER(5) NOT NULL,
    -- discount type
    discount_type  VARCHAR2(1) NOT NULL
);

ALTER TABLE jc_discount
    ADD CONSTRAINT ch_inh_jc_discount CHECK ( discount_type IN ( 'C', 'T' ) );

COMMENT ON COLUMN jc_discount.discount_id IS
    'discount id';

COMMENT ON COLUMN jc_discount.discount_type IS
    'discount type';
```

```
ALTER TABLE jc_discount ADD CONSTRAINT jc_discount_pk PRIMARY KEY
( discount_id );
```

```
CREATE TABLE jc_invoice (
-- Invoice id
  invoice_id    NUMBER(5) NOT NULL,
-- INVOICE DATE
  invoice_date  DATE NOT NULL,
-- INVOICE AMOUNT
  invoice_amount NUMBER(7, 2) NOT NULL,
-- service id
  service_id    NUMBER(5) NOT NULL
);
```

```
COMMENT ON COLUMN jc_invoice.invoice_id IS
  'Invoice id';
```

```
COMMENT ON COLUMN jc_invoice.invoice_date IS
  'INVOICE DATE';
```

```
COMMENT ON COLUMN jc_invoice.invoice_amount IS
  'INVOICE AMOUNT';
```

```
COMMENT ON COLUMN jc_invoice.service_id IS
  'service id';
```

```
ALTER TABLE jc_invoice ADD CONSTRAINT jc_invoice_pk PRIMARY KEY
( invoice_id );
```

```
CREATE TABLE jc_loc (
-- office location
  loc_id    NUMBER(4) NOT NULL,
-- office location street
  street    VARCHAR2(30) NOT NULL,
-- office location city
  city      VARCHAR2(30) NOT NULL,
-- location state
  state     VARCHAR2(30) NOT NULL,
```

```

-- office location zipcode
zipcode VARCHAR2(10) NOT NULL,
-- office phone number
phone_no VARCHAR2(12) NOT NULL
);

COMMENT ON COLUMN jc_loc.loc_id IS
    'office location';

COMMENT ON COLUMN jc_loc.street IS
    'office location street';

COMMENT ON COLUMN jc_loc.city IS
    'office location city';

COMMENT ON COLUMN jc_loc.state IS
    'office location state';

COMMENT ON COLUMN jc_loc.zipcode IS
    'office location zipcode';

COMMENT ON COLUMN jc_loc.phone_no IS
    'office phone number';

ALTER TABLE jc_loc ADD CONSTRAINT jc_loc_pk PRIMARY KEY ( loc_id );

CREATE TABLE jc_payment (
-- PAYMENT ID
    payment_id NUMBER(5) NOT NULL,
-- PAYMENT DATE
    payment_date DATE NOT NULL,
-- card number
    card_no NUMBER(16) NOT NULL,
-- invoice id
    invoice_id NUMBER(5) NOT NULL,
-- card type id
    card_type_id NUMBER(5) NOT NULL
);

```

```
COMMENT ON COLUMN jc_payment.payment_id IS  
    'PAYMENT ID';
```

```
COMMENT ON COLUMN jc_payment.payment_date IS  
    'PAYMENT DATE';
```

```
COMMENT ON COLUMN jc_payment.card_no IS  
    'card number';
```

```
COMMENT ON COLUMN jc_payment.invoice_id IS  
    'invoice id';
```

```
COMMENT ON COLUMN jc_payment.card_type_id IS  
    'card type id';
```

```
ALTER TABLE jc_payment ADD CONSTRAINT jc_payment_pk PRIMARY KEY  
( payment_id );
```

```
CREATE TABLE jc_service (  
    -- rent service id  
    service_id NUMBER(5) NOT NULL,  
    -- rent service days number  
    days_no NUMBER(2) NOT NULL,  
    -- rent service start odometer  
    start_odo NUMBER(6) NOT NULL,  
    -- rent service end odometer  
    end_odo NUMBER(6) NOT NULL,  
    -- pickup location  
    pickup_loc NUMBER(4) NOT NULL,  
    -- dropoff location  
    dropoff_loc NUMBER(4) NOT NULL,  
    -- discount id  
    discount_id NUMBER(5) NOT NULL  
);
```

```
COMMENT ON COLUMN jc_service.service_id IS  
    'rent service id';
```

```
COMMENT ON COLUMN jc_service.days_no IS  
    'rent service days number';
```

```
COMMENT ON COLUMN jc_service.start_odo IS  
    'rent service start odometer';
```

```
COMMENT ON COLUMN jc_service.end_odo IS  
    'rent service end odometer';
```

```
COMMENT ON COLUMN jc_service.pickup_loc IS  
    'pickup location';
```

```
COMMENT ON COLUMN jc_service.dropoff_loc IS  
    'dropoff location';
```

```
COMMENT ON COLUMN jc_service.discount_id IS  
    'discount id';
```

```
CREATE UNIQUE INDEX jc_service__idx ON  
    jc_service (  
        discount_id  
    ASC );
```

```
ALTER TABLE jc_service ADD CONSTRAINT jc_service_pk PRIMARY KEY  
( service_id );
```

```
CREATE TABLE jc_vehicle (  
-- Vehicle Identification Number  
    vehicle_vin    VARCHAR2(17) NOT NULL,  
-- VEHICLE MAKE  
    vehicle_make   VARCHAR2(30) NOT NULL,  
-- VEHICLE MODEL  
    vehicle_model  VARCHAR2(30) NOT NULL,  
-- VEHICLE YEAR  
    vehicle_year   NUMBER(4) NOT NULL,  
-- LICENSE PLATE NUMBER  
    license_plate_no VARCHAR2(8) NOT NULL,
```

```

-- location id
loc_id          NUMBER(4) NOT NULL,
-- vehicle id
vehicle_id      NUMBER(5) NOT NULL
);

COMMENT ON COLUMN jc_vehicle.vehicle_vin IS
    'Vehicle Identification Number';

COMMENT ON COLUMN jc_vehicle.vehicle_make IS
    'VEHICLE MAKE';

COMMENT ON COLUMN jc_vehicle.vehicle_model IS
    'VEHICLE MODEL';

COMMENT ON COLUMN jc_vehicle.vehicle_year IS
    'VEHICLE YEAR';

COMMENT ON COLUMN jc_vehicle.license_plate_no IS
    'LICENSE PLATE NUMBER';

COMMENT ON COLUMN jc_vehicle.loc_id IS
    'location id';

COMMENT ON COLUMN jc_vehicle.vehicle_id IS
    'vehicle id';

ALTER TABLE jc_vehicle ADD CONSTRAINT jc_vehicle_pk PRIMARY KEY
( vehicle_vin );

CREATE TABLE jc_vehicle_class (
-- vehicle class id
vehicle_id      NUMBER(5) NOT NULL,
-- vehicle type
vehicle_type    VARCHAR2(30) NOT NULL,
-- rental rate per day
daily_rate      NUMBER(5, 2) NOT NULL,
-- fees for over mileage per day

```

```

        over_mileage_rate NUMBER(4, 2) NOT NULL,
-- odometer limit
        odo_limit          NUMBER(4) NOT NULL,
-- service id
        service_id         NUMBER(5) NOT NULL
    );

COMMENT ON COLUMN jc_vehicle_class.vehicle_id IS
    'vehicle class id';

COMMENT ON COLUMN jc_vehicle_class.vehicle_type IS
    'vehicle type';

COMMENT ON COLUMN jc_vehicle_class.daily_rate IS
    'rental rate per day';

COMMENT ON COLUMN jc_vehicle_class.over_mileage_rate IS
    'fees for over mileage per day';

COMMENT ON COLUMN jc_vehicle_class.odo_limit IS
    'odometer limit';

COMMENT ON COLUMN jc_vehicle_class.service_id IS
    'service id';

ALTER TABLE jc_vehicle_class ADD CONSTRAINT jc_vehicle_class_pk
PRIMARY KEY ( vehicle_id );

ALTER TABLE corporate
    ADD CONSTRAINT corporate_jc_customer_fk FOREIGN KEY ( cust_id )
        REFERENCES jc_customer ( cust_id );

ALTER TABLE discount_corp
    ADD CONSTRAINT discount_corp_jc_discount_fk FOREIGN KEY
( discount_id )
        REFERENCES jc_discount ( discount_id );

ALTER TABLE discount_indi

```

```
ADD CONSTRAINT discount_indi_jc_discount_fk FOREIGN KEY
( discount_id )
REFERENCES jc_discount ( discount_id );

ALTER TABLE individual
ADD CONSTRAINT individual_jc_customer_fk FOREIGN KEY ( cust_id )
REFERENCES jc_customer ( cust_id );

ALTER TABLE jc_customer
ADD CONSTRAINT jc_customer_jc_service_fk FOREIGN KEY ( service_id )
REFERENCES jc_service ( service_id );

ALTER TABLE jc_invoice
ADD CONSTRAINT jc_invoice_jc_service_fk FOREIGN KEY ( service_id )
REFERENCES jc_service ( service_id );

ALTER TABLE jc_payment
ADD CONSTRAINT jc_payment_jc_card_type_fk FOREIGN KEY
( card_type_id )
REFERENCES jc_card_type ( card_type_id );

ALTER TABLE jc_payment
ADD CONSTRAINT jc_payment_jc_invoice_fk FOREIGN KEY ( invoice_id )
REFERENCES jc_invoice ( invoice_id );

ALTER TABLE jc_service
ADD CONSTRAINT jc_service_jc_discount_fk FOREIGN KEY ( discount_id )
REFERENCES jc_discount ( discount_id );

ALTER TABLE jc_service
ADD CONSTRAINT jc_service_jc_loc_fk FOREIGN KEY ( pickup_loc )
REFERENCES jc_loc ( loc_id );

ALTER TABLE jc_service
ADD CONSTRAINT jc_service_jc_loc_fkv2 FOREIGN KEY ( dropoff_loc )
REFERENCES jc_loc ( loc_id );

ALTER TABLE jc_vehicle_class
```



```

        ADD CONSTRAINT jc_vehicle_class_jc_service_fk FOREIGN KEY
( service_id )
        REFERENCES jc_service ( service_id );

ALTER TABLE jc_vehicle
        ADD CONSTRAINT jc_vehicle_jc_loc_fk FOREIGN KEY ( loc_id )
        REFERENCES jc_loc ( loc_id );

ALTER TABLE jc_vehicle
        ADD CONSTRAINT jc_vehicle_jc_vehicle_class_fk FOREIGN KEY
( vehicle_id )
        REFERENCES jc_vehicle_class ( vehicle_id );

CREATE OR REPLACE TRIGGER arc_fkarc_4_corporate BEFORE
        INSERT OR UPDATE OF cust_id ON corporate
        FOR EACH ROW
DECLARE
        d VARCHAR2(1);
BEGIN
        SELECT
                a.cust_type
        INTO d
        FROM
                jc_customer a
        WHERE
                a.cust_id = :new.cust_id;

        IF ( d IS NULL OR d <> 'C' ) THEN
                raise_application_error(-20223, 'FK CORPORATE_JC_CUSTOMER_FK in
Table CORPORATE violates Arc constraint on Table JC_CUSTOMER -
discriminator column CUST_TYPE doesn't have value "C"'
                );
        END IF;

EXCEPTION
        WHEN no_data_found THEN
                NULL;
        WHEN OTHERS THEN

```

```

        RAISE;
END;
/

CREATE OR REPLACE TRIGGER arc_fkarc_4_individual BEFORE
    INSERT OR UPDATE OF cust_id ON individual
    FOR EACH ROW
DECLARE
    d VARCHAR2(1);
BEGIN
    SELECT
        a.cust_type
    INTO d
    FROM
        jc_customer a
    WHERE
        a.cust_id = :new.cust_id;

    IF ( d IS NULL OR d <> 'I' ) THEN
        raise_application_error(-20223, 'FK INDIVIDUAL_JC_CUSTOMER_FK in
Table INDIVIDUAL violates Arc constraint on Table JC_CUSTOMER -
discriminator column CUST_TYPE doesn't have value "I"
        );
    END IF;

EXCEPTION
    WHEN no_data_found THEN
        NULL;
    WHEN OTHERS THEN
        RAISE;
END;
/

CREATE OR REPLACE TRIGGER arc_fkarc_5_discount_indi BEFORE
    INSERT OR UPDATE OF discount_id ON discount_indi
    FOR EACH ROW
DECLARE
    d VARCHAR2(1);

```

```

BEGIN
    SELECT
        a.discount_type
    INTO d
    FROM
        jc_discount a
    WHERE
        a.discount_id = :new.discount_id;

    IF ( d IS NULL OR d <> 'I' ) THEN
        raise_application_error(-20223, 'FK DISCOUNT_INDI_JC_DISCOUNT_FK
in Table DISCOUNT_INDI violates Arc constraint on Table JC_DISCOUNT -
discriminator column DISCOUNT_TYPE doesn"t have value "I"
        );
    END IF;

EXCEPTION
    WHEN no_data_found THEN
        NULL;
    WHEN OTHERS THEN
        RAISE;
END;
/

CREATE OR REPLACE TRIGGER arc_fkarc_5_discount_corp BEFORE
    INSERT OR UPDATE OF discount_id ON discount_corp
    FOR EACH ROW
DECLARE
    d VARCHAR2(1);
BEGIN
    SELECT
        a.discount_type
    INTO d
    FROM
        jc_discount a
    WHERE
        a.discount_id = :new.discount_id;

```

```

        IF ( d IS NULL OR d <> 'C' ) THEN
            raise_application_error(-20223, 'FK
DISCOUNT_CORP_JC_DISCOUNT_FK in Table DISCOUNT_CORP violates Arc
constraint on Table JC_DISCOUNT - discriminator column DISCOUNT_TYPE
doesn"t have value "C"'
        );
    END IF;

EXCEPTION
    WHEN no_data_found THEN
        NULL;
    WHEN OTHERS THEN
        RAISE;
END;
/

```

-- Oracle SQL Developer Data Modeler Summary Report:

```

--
-- CREATE TABLE                13
-- CREATE INDEX                  1
-- ALTER TABLE                 31
-- CREATE VIEW                   0
-- ALTER VIEW                    0
-- CREATE PACKAGE                0
-- CREATE PACKAGE BODY           0
-- CREATE PROCEDURE              0
-- CREATE FUNCTION               0
-- CREATE TRIGGER                4
-- ALTER TRIGGER                 0
-- CREATE COLLECTION TYPE        0
-- CREATE STRUCTURED TYPE        0
-- CREATE STRUCTURED TYPE BODY   0
-- CREATE CLUSTER                0
-- CREATE CONTEXT                0
-- CREATE DATABASE               0
-- CREATE DIMENSION              0
-- CREATE DIRECTORY              0

```

```
-- CREATE DISK GROUP          0
-- CREATE ROLE                0
-- CREATE ROLLBACK SEGMENT    0
-- CREATE SEQUENCE            0
-- CREATE MATERIALIZED VIEW    0
-- CREATE MATERIALIZED VIEW LOG 0
-- CREATE SYNONYM             0
-- CREATE TABLESPACE         0
-- CREATE USER                0
--
-- DROP TABLESPACE           0
-- DROP DATABASE              0
--
-- REDACTION POLICY           0
--
-- ORDS DROP SCHEMA           0
-- ORDS ENABLE SCHEMA         0
-- ORDS ENABLE OBJECT         0
--
-- ERRORS                     0
-- WARNINGS                   0
```

e) Trigger Code

```
CREATE OR REPLACE TRIGGER calculate_invoice
BEFORE INSERT ON jc_invoice
FOR EACH ROW
DECLARE
    v_daily_rate      NUMBER(5, 2);
    v_over_mileage_rate NUMBER(4, 2);
    v_extra_miles      NUMBER(6);
BEGIN
    -- Get the daily rate and over mileage rate for the associated vehicle class
    SELECT vc.daily_rate, vc.over_mileage_rate
    INTO v_daily_rate, v_over_mileage_rate
    FROM jc_vehicle_class vc
    WHERE vc.service_id = (SELECT service_id FROM jc_service WHERE
service_id = :NEW.service_id);

    -- Calculate the number of extra miles
    SELECT GREATEST(end_odo - start_odo - (days_no * vc.odo_limit), 0)
    INTO v_extra_miles
    FROM jc_service
    WHERE service_id = :NEW.service_id;

    -- Calculate the invoice amount
    :NEW.invoice_amount := (:NEW.days_no * v_daily_rate) + (v_extra_miles *
v_over_mileage_rate);
END;
/
```

f) Check Constraints DDL Code

```
ALTER TABLE discount_indi
ADD CONSTRAINT DiscountDate CHECK (start_date <= end_date);
```

```

ALTER TABLE jc_vehicle_class
ADD CONSTRAINT Rate CHECK (daily_rate > 0 AND over_mileage_rate > 0
AND odo_limit > 0);

ALTER TABLE jc_invoice
ADD CONSTRAINT InvoiceAmount CHECK (invoice_amount >= 0);

ALTER TABLE jc_payment
ADD CONSTRAINT PaymentDate CHECK (payment_date <= SYSDATE);

ALTER TABLE Invoice
ADD CONSTRAINT InvoiceDate CHECK (invoice_date <= SYSDATE);

ALTER TABLE corporate
ADD CONSTRAINT UniqueRegNo UNIQUE (reg_no);

ALTER TABLE corporate
ADD CONSTRAINT UniqueEMPID UNIQUE (emp_id);

ALTER TABLE jc_payment
ADD CONSTRAINT InvoicePaymentDate CHECK (invoice_date <= payment_date);

```

g) DML Code

```

INSERT INTO jc_loc (loc_id, city, street, state, zipcode, phone_no) VALUES (1,
'Jersey City', '201 PROSPECT ST', 'NJ', '07306', '735-428-8435');
INSERT INTO jc_loc (loc_id, city, street, state, zipcode, phone_no) VALUES (2,
'Manhattan', '456 Elm Street', 'NY', '10013', '542-416-1864');
INSERT INTO jc_loc (loc_id, city, street, state, zipcode, phone_no) VALUES (3,
'San Diego', '3881 SEDGWICK AVE', 'CA', '92101', '743-410-3542');
INSERT INTO jc_loc (loc_id, city, street, state, zipcode, phone_no) VALUES (4,
'Modesto', '1 BARBARA RD', 'OH', '95354', '150-348-8020');
INSERT INTO jc_loc (loc_id, city, street, state, zipcode, phone_no) VALUES (5,
'Riverside', '107 CLARENDON RD', 'MN', '92501', '848-181-4610');
INSERT INTO jc_loc (loc_id, city, street, state, zipcode, phone_no) VALUES (6,
'Anaheim', '1 VERNON ST', 'GA', '92803', '105-543-3570');
INSERT INTO jc_loc (loc_id, city, street, state, zipcode, phone_no) VALUES (7,
'Irvine', '150 BRABANT ST', 'FL', '92612', '135-654-3418');

```

```
INSERT INTO jc_loc (loc_id, city, street, state, zipcode, phone_no) VALUES (8,
'Fresno', '6 W 107TH ST', 'CT', '93701', '843-420-2345');
INSERT INTO jc_loc (loc_id, city, street, state, zipcode, phone_no) VALUES (9,
'Long Beach', '35 TRENT CT', 'SD', '90801', '405-345-3458');
INSERT INTO jc_loc (loc_id, city, street, state, zipcode, phone_no) VALUES (10,
'Los Angeles', '13 Main Street', 'LA', '90802', '435-802-1505')
```

```
INSERT INTO jc_discount (discount_id, discount_type) VALUES (1, 'C');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (2, 'C');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (3, 'C');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (4, 'C');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (5, 'C');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (6, 'C');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (7, 'C');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (8, 'C');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (9, 'C');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (10, 'C');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (11, 'T');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (12, 'T');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (13, 'T');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (14, 'T');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (15, 'T');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (16, 'T');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (17, 'T');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (18, 'T');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (19, 'T');
INSERT INTO jc_discount (discount_id, discount_type) VALUES (20, 'T');
```

```
INSERT INTO discount_corp (discount_id, disc_perc, corp_name) VALUES (1, 10,
'Acme Corporation');
INSERT INTO discount_corp (discount_id, disc_perc, corp_name) VALUES (2, 15,
'Initech');
INSERT INTO discount_corp (discount_id, disc_perc, corp_name) VALUES (3, 20,
'Wayne Enterprises');
INSERT INTO discount_corp (discount_id, disc_perc, corp_name) VALUES (4,
25, 'LexCorp');
INSERT INTO discount_corp (discount_id, disc_perc, corp_name) VALUES (5, 30,
'Stark Industries');
INSERT INTO discount_corp (discount_id, disc_perc, corp_name) VALUES (6, 35,
'Umbrella Corporation');
INSERT INTO discount_corp (discount_id, disc_perc, corp_name) VALUES (7, 40,
'Google');
```



```
INSERT INTO discount_corp (discount_id, disc_perc, corp_name) VALUES (8, 45, 'Microsoft');
INSERT INTO discount_corp (discount_id, disc_perc, corp_name) VALUES (9, 50, 'Apple');
INSERT INTO discount_corp (discount_id, disc_perc, corp_name) VALUES (10, 55, 'Amazon');
```

```
INSERT INTO discount_indi (discount_id, disc_perc, start_date, end_date) VALUES (11, 60, TO_DATE('08/01/2023', 'MM/DD/YYYY'), TO_DATE('11/21/2023', 'MM/DD/YYYY'));
INSERT INTO discount_indi (discount_id, disc_perc, start_date, end_date) VALUES (12, 65, TO_DATE('09/10/2023', 'MM/DD/YYYY'), TO_DATE('12/25/2023', 'MM/DD/YYYY'));
INSERT INTO discount_indi (discount_id, disc_perc, start_date, end_date) VALUES (13, 15, TO_DATE('10/01/2023', 'MM/DD/YYYY'), TO_DATE('11/18/2023', 'MM/DD/YYYY'));
INSERT INTO discount_indi (discount_id, disc_perc, start_date, end_date) VALUES (14, 25, TO_DATE('10/08/2023', 'MM/DD/YYYY'), TO_DATE('11/24/2023', 'MM/DD/YYYY'));
INSERT INTO discount_indi (discount_id, disc_perc, start_date, end_date) VALUES (15, 12, TO_DATE('10/15/2023', 'MM/DD/YYYY'), TO_DATE('11/25/2023', 'MM/DD/YYYY'));
INSERT INTO discount_indi (discount_id, disc_perc, start_date, end_date) VALUES (16, 35, TO_DATE('10/23/2023', 'MM/DD/YYYY'), TO_DATE('11/29/2023', 'MM/DD/YYYY'));
INSERT INTO discount_indi (discount_id, disc_perc, start_date, end_date) VALUES (17, 11, TO_DATE('11/01/2023', 'MM/DD/YYYY'), TO_DATE('01/21/2024', 'MM/DD/YYYY'));
INSERT INTO discount_indi (discount_id, disc_perc, start_date, end_date) VALUES (18, 18, TO_DATE('11/01/2023', 'MM/DD/YYYY'), TO_DATE('01/27/2024', 'MM/DD/YYYY'));
INSERT INTO discount_indi (discount_id, disc_perc, start_date, end_date) VALUES (19, 22, TO_DATE('11/01/2023', 'MM/DD/YYYY'), TO_DATE('01/25/2024', 'MM/DD/YYYY'));
INSERT INTO discount_indi (discount_id, disc_perc, start_date, end_date) VALUES (20, 16, TO_DATE('11/01/2023', 'MM/DD/YYYY'), TO_DATE('02/12/2024', 'MM/DD/YYYY'));
```

```
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (1, 2, 10000, 10500, 1, 2, 1);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (2, 1, 12000, 12700, 3, 4, 2);
```

```
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (3, 2, 14000, 14500, 5, 6, 3);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (4, 6, 16000, 16700, 7, 8, 4);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (5, 2, 18000, 18500, 9, 10, 5);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (6, 3, 20000, 20700, 1, 3, 6);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (7, 5, 22000, 22700, 3, 5, 7);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (8, 3, 24000, 24700, 5, 10, 8);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (9, 2, 26000, 26700, 7, 9, 9);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (10, 7, 28000, 29000, 4, 1, 10);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (11, 2, 30000, 30800, 5, 7, 11);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (12, 5, 50000, 52000, 2, 8, 12);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (13, 2, 58000, 58500, 9, 1, 13);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (14, 4, 84000, 86000, 8, 1, 14);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (15, 2, 95000, 96500, 4, 7, 15);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (16, 7, 18000, 19000, 10, 1, 16);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (17, 2, 10000, 10800, 5, 7, 17);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (18, 5, 20000, 22000, 2, 8, 18);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (19, 2, 78000, 78500, 9, 1, 19);
INSERT INTO jc_service (service_id, days_no, start_odo, end_odo, pickup_loc, dropoff_loc, discount_id) VALUES (20, 4, 64000, 66000, 8, 1, 20);
```

```
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode, phone_no, email, cust_type, service_id) VALUES (1, 'David', 'Doe', '123 Main Street', 'Los Angeles', 'CA', 14886, '123-456-7890', 'David.Doe@example.com', 'C', 1);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode, phone_no, email, cust_type, service_id) VALUES (2, 'Jane', 'Brown', '456 Elm Street', 'Jersey City', 'NJ', 59641, '987-654-3210', 'Jane.Brown@example.com', 'C', 6);
```

```
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (3, 'Mary', 'Williams', '789 Oak
Street', 'San Diego', 'CA', 23233, '987-453-3210', 'Mary.Williams@example.com', 'C',
10);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (4, 'Linda', 'Smith', '1 SAGE PL',
'Manhattan', 'NY', 16642, '456-789-0183', 'Linda.Smith@example.com', 'C', 3);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (5, 'Patricia', 'Brown', '900
AVENUE C', 'Fresno', 'CA', 69840, '456-754-0123', 'Patricia.Brown@example.com',
'C', 7);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (6, 'Jane', 'Garcia', '301 HULSE
LANDING RD', 'Modesto', 'CA', 54530, '987-654-8643', 'Jane.Garcia@example.com',
'C', 4);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (7, 'William', 'Williams', '1125
ROUTE 112', 'Riverside', 'CA', 84818, '789-012-3456',
'William.Williams@example.com', 'C', 8);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (8, 'David', 'Brown', '700
GARNSEY RD', 'Long Beach', 'CA', 90106, '789-012-8466',
'David.Brown@example.com', 'C', 5);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (9, 'Susan', 'Williams', '8
TWISTING DR', 'Anaheim', 'CA', 41109, '184-456-7890',
'Susan.Williams@example.com', 'C', 9);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (10, 'William', 'Jones', '9162 HIGH
BRIDGE RD', 'Irvine', 'CA', 68815, '789-012-4256', 'William.Jones@example.com',
'C', 2);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (11, 'Emily', 'Davis', '2436 Naples
Avenue', 'Panama City', 'FL', 32405, '133-456-7890', 'Emily.Davis@example.com', 'T',
11);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (12, 'Ryan', 'Mitchell', '1030 E
Main St', 'Benton Harbor', 'MI', 49022, '438-654-3210',
'Ryan.Mitchell@example.com', 'T', 16);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (13, 'Olivia', 'Garcia', '244 W
109TH ST', 'Brooklyn', 'NY', 10025, '450-654-3210', 'Olivia.Garcia@example.com',
'T', 20);
```

```
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (14, 'Ethan', 'Anderson', '1561
SHERIDAN AVE', 'Manhattan', 'NY', 16642, '843-789-0123',
'Ethan.Anderson@example.com', 'T', 13);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (15, 'Ava', 'Taylor', '301
CAROLINE ST', 'Fresno', 'CA', 69840, '456-108-0123', 'Ava.Taylor@example.com',
'T', 17);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (16, 'Benjamin', 'Martinez', '5400
DUNNING AVE', 'Modesto', 'CA', 54530, '987-435-3210',
'Benjamin.Martinez@example.com', 'T', 14);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (17, 'Sophia', 'Brown', '73 LINDEN
ST', 'Riverside', 'CA', 84818, '789-012-4851', 'Sophia.Brown@example.com', 'T', 18);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (18, 'Jackson', 'Wright', '30 SAINT
JOHN ST', 'Long Beach', 'CA', 90106, '789-012-4350',
'Jackson.Wright@example.com', 'T', 15);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (19, 'Mia', 'Robinson', '482 VAN
DUZER ST', 'Anaheim', 'CA', 41109, '123-456-1571', 'Mia.Robinson@example.com',
'T', 19);
INSERT INTO jc_customer (cust_id, fname, lname, street, city, state, zipcode,
phone_no, email, cust_type, service_id) VALUES (20, 'Noah', 'Adams', '723 BROWN
ST', 'Irvine', 'CA', 68815, '789-012-4287', 'Noah.Adams@example.com', 'T', 12);

INSERT INTO corporate (cust_id, emp_id, corp_name, reg_no) VALUES (1, 101,
'Acme Corporation', '123456789');
INSERT INTO corporate (cust_id, emp_id, corp_name, reg_no) VALUES (2, 102,
'Initech', '987654321');
INSERT INTO corporate (cust_id, emp_id, corp_name, reg_no) VALUES (3, 103,
'Wayne Enterprises', '098765432');
INSERT INTO corporate (cust_id, emp_id, corp_name, reg_no) VALUES (4, 104,
'LexCorp', '321654987');
INSERT INTO corporate (cust_id, emp_id, corp_name, reg_no) VALUES (5, 105,
'Stark Industries', '765432198');
INSERT INTO corporate (cust_id, emp_id, corp_name, reg_no) VALUES (6, 106,
'Umbrella Corporation', '321456789');
INSERT INTO corporate (cust_id, emp_id, corp_name, reg_no) VALUES (7, 107,
'Google', '987321654');
INSERT INTO corporate (cust_id, emp_id, corp_name, reg_no) VALUES (8, 108,
'Microsoft', '098216543');
```

```
INSERT INTO corporate (cust_id, emp_id, corp_name, reg_no) VALUES (9, 109, 'Apple', '216549873');
INSERT INTO corporate (cust_id, emp_id, corp_name, reg_no) VALUES (10, 110, 'Amazon', '654321987');
```

```
INSERT INTO individual (cust_id, drv_license_no, ins_cmp_name, ins_pol_no) VALUES (11, '67890', 'American Family Insurance', '0165000498730');
INSERT INTO individual (cust_id, drv_license_no, ins_cmp_name, ins_pol_no) VALUES (12, '01234', 'Mercury Insurance', '0543000219870');
INSERT INTO individual (cust_id, drv_license_no, ins_cmp_name, ins_pol_no) VALUES (13, '56789', 'Nationwide General Insurance', '0894500061230');
INSERT INTO individual (cust_id, drv_license_no, ins_cmp_name, ins_pol_no) VALUES (14, '90123', 'Erie Insurance Exchange', '9076594643210');
INSERT INTO individual (cust_id, drv_license_no, ins_cmp_name, ins_pol_no) VALUES (15, '23456', 'SFMA Insurance Company', '1234567000890');
INSERT INTO individual (cust_id, drv_license_no, ins_cmp_name, ins_pol_no) VALUES (16, '78901', 'PM Insurance Company', '9076500043210');
INSERT INTO individual (cust_id, drv_license_no, ins_cmp_name, ins_pol_no) VALUES (17, '12340', 'GG Insurance Company', '0980650004320');
INSERT INTO individual (cust_id, drv_license_no, ins_cmp_name, ins_pol_no) VALUES (18, '67895', 'APC Insurance Company', '2105490008730');
INSERT INTO individual (cust_id, drv_license_no, ins_cmp_name, ins_pol_no) VALUES (19, '85231', 'USAAC Insurance Company', '6543219000870');
INSERT INTO individual (cust_id, drv_license_no, ins_cmp_name, ins_pol_no) VALUES (20, '23450', 'NM Insurance Company', '8894561200030');
```

```
INSERT INTO jc_vehicle_class (vehicle_id, vehicle_type, daily_rate, over_mileage_rate, odo_limit, service_id) VALUES (1, 'Economy', 50.00, 1.00, 100, 1);
INSERT INTO jc_vehicle_class (vehicle_id, vehicle_type, daily_rate, over_mileage_rate, odo_limit, service_id) VALUES (2, 'Compact', 40.00, 1.00, 150, 2);
INSERT INTO jc_vehicle_class (vehicle_id, vehicle_type, daily_rate, over_mileage_rate, odo_limit, service_id) VALUES (3, 'Midsize', 55.00, 2.00, 200, 3);
INSERT INTO jc_vehicle_class (vehicle_id, vehicle_type, daily_rate, over_mileage_rate, odo_limit, service_id) VALUES (4, 'Fullsize', 65.00, 2.00, 250, 4);
INSERT INTO jc_vehicle_class (vehicle_id, vehicle_type, daily_rate, over_mileage_rate, odo_limit, service_id) VALUES (5, 'SUV', 70.00, 2.00, 300, 5);
INSERT INTO jc_vehicle_class (vehicle_id, vehicle_type, daily_rate, over_mileage_rate, odo_limit, service_id) VALUES (6, 'Van', 50.00, 2.00, 350, 6);
```



```
INSERT INTO jc_vehicle_class (vehicle_id, vehicle_type, daily_rate,
over_mileage_rate, odo_limit, service_id) VALUES (7, 'Luxury', 75.00, 3.00, 400, 7);
INSERT INTO jc_vehicle_class (vehicle_id, vehicle_type, daily_rate,
over_mileage_rate, odo_limit, service_id) VALUES (8, 'Sports', 60.00, 1.00, 200, 8);
INSERT INTO jc_vehicle_class (vehicle_id, vehicle_type, daily_rate,
over_mileage_rate, odo_limit, service_id) VALUES (9, 'Exotic', 70.00, 4.00, 500, 9);
INSERT INTO jc_vehicle_class (vehicle_id, vehicle_type, daily_rate,
over_mileage_rate, odo_limit, service_id) VALUES (10, 'Unlimited', 50.00, 2.00,
200, 10);
```

```
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('34645433723964390', 'Toyota',
'Elantra', 2023, 'JKL04420', 2, 9);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('64548180238807220', 'Toyota',
'Camry', 2020, 'DEF45600', 1, 1);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('25242520074326360', 'Honda',
'Elantra', 2023, 'JKL01200', 3, 3);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('20635667483605990', 'Toyota',
'Camry', 2023, 'GHI78900', 4, 6);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('77807017992587660', 'Honda',
'Accord', 2022, 'ABC12300', 1, 2);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('93972144626475160', 'Honda',
'Accord', 2021, 'GHI74055', 1, 4);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('93630501216869070', 'Hyundai',
'Altima', 2020, 'JKL00570', 3, 5);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('38068192468764550', 'Honda',
'Elantra', 2022, 'GHI74020', 2, 4);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('96000604123026110', 'Toyota',
'Altima', 2021, 'JKL04050', 1, 6);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('88558226746779550', 'Honda',
'Elantra', 2021, 'JKL05000', 4, 5);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('84759324439018280', 'Honda',
'Camry', 2022, 'ABC17600', 4, 1);
```

```
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('1880270529393440', 'Nissan',
'Altima', 2023, 'JKL04100', 2, 10);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('70108202227182780', 'Nissan',
'Camry', 2022, 'DEF50542', 1, 5);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('56473604679613320', 'Honda',
'Accord', 2022, 'DEF18105', 3, 7);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('91044619254230110', 'Hyundai',
'Camry', 2021, 'DEF40273', 5, 6);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('96476313716194310', 'Honda',
'Altima', 2023, 'ABC10573', 3, 1);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('56710278506513240', 'Hyundai',
'Accord', 2023, 'GHI46020', 4, 2);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('36417030095670650', 'Toyota',
'Elantra', 2020, 'GHI71010', 2, 2);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('40061061306428900', 'Toyota',
'Elantra', 2021, 'ABC18800', 2, 8);
INSERT INTO jc_vehicle (vehicle_vin, vehicle_make, vehicle_model, vehicle_year,
license_plate_no, loc_id, vehicle_id) VALUES ('39787974838173440', 'Hyundai',
'Accord', 2020, 'JKL02400', 3, 7);
```

```
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (1, TO_DATE('11/1/2023', 'MM/DD/YYYY'), 286.05, 20);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (2, TO_DATE('11/1/2023', 'MM/DD/YYYY'), 260.32, 18);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (3, TO_DATE('11/2/2023', 'MM/DD/YYYY'), 458.65, 19);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (4, TO_DATE('11/3/2023', 'MM/DD/YYYY'), 364.14, 1);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (5, TO_DATE('11/5/2023', 'MM/DD/YYYY'), 176.61, 2);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (6, TO_DATE('11/5/2023', 'MM/DD/YYYY'), 412.26, 17);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (7, TO_DATE('11/7/2023', 'MM/DD/YYYY'), 424.74, 16);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (8, TO_DATE('11/7/2023', 'MM/DD/YYYY'), 120.17, 3);
```

```
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (9, TO_DATE('11/7/2023', 'MM/DD/YYYY'), 365.60, 4);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (10, TO_DATE('11/8/2023', 'MM/DD/YYYY'), 401.10, 15);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (11, TO_DATE('11/9/2023', 'MM/DD/YYYY'), 491.33, 9);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (12, TO_DATE('11/10/2023', 'MM/DD/YYYY'), 390.93, 5);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (13, TO_DATE('11/10/2023', 'MM/DD/YYYY'), 486.97, 6);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (14, TO_DATE('11/10/2023', 'MM/DD/YYYY'), 351.70, 13);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (15, TO_DATE('11/11/2023', 'MM/DD/YYYY'), 251.70, 14);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (16, TO_DATE('11/12/2023', 'MM/DD/YYYY'), 428.99, 7);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (17, TO_DATE('11/13/2023', 'MM/DD/YYYY'), 183.92, 8);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (18, TO_DATE('11/14/2023', 'MM/DD/YYYY'), 114.53, 12);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (19, TO_DATE('11/14/2023', 'MM/DD/YYYY'), 362.90, 11);
INSERT INTO jc_invoice (invoice_id, invoice_date, invoice_amount, service_id)
VALUES (20, TO_DATE('11/15/2023', 'MM/DD/YYYY'), 172.14, 10);

INSERT INTO jc_card_type (card_type_id, type_name) VALUES (1, 'Visa');
INSERT INTO jc_card_type (card_type_id, type_name) VALUES (2, 'Mastercard');
INSERT INTO jc_card_type (card_type_id, type_name) VALUES (3, 'American
Express');
INSERT INTO jc_card_type (card_type_id, type_name) VALUES (4, 'Discover');
INSERT INTO jc_card_type (card_type_id, type_name) VALUES (5, 'JCB');
INSERT INTO jc_card_type (card_type_id, type_name) VALUES (6, 'Diners Club');
INSERT INTO jc_card_type (card_type_id, type_name) VALUES (7, 'Carte
Blanche');
INSERT INTO jc_card_type (card_type_id, type_name) VALUES (8, 'China
UnionPay');
INSERT INTO jc_card_type (card_type_id, type_name) VALUES (9, 'Maestro');
INSERT INTO jc_card_type (card_type_id, type_name) VALUES (10, 'Electron');

INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (1, TO_DATE('11/1/2023', 'MM/DD/YYYY'),
'5592056333172992', 1, 4);
```



```
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (2, TO_DATE('11/12/2023', 'MM/DD/YYYY'),
'6544036909269729', 2, 5);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (3, TO_DATE('11/07/2023', 'MM/DD/YYYY'),
'5901389979804023', 3, 3);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (4, TO_DATE('11/12/2023', 'MM/DD/YYYY'),
'7101689179311568', 4, 1);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (5, TO_DATE('11/10/2023', 'MM/DD/YYYY'),
'1765842134041871', 5, 2);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (6, TO_DATE('11/08/2023', 'MM/DD/YYYY'),
'6624503305630504', 6, 4);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (7, TO_DATE('11/09/2023', 'MM/DD/YYYY'),
'4722663911676210', 7, 5);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (8, TO_DATE('11/12/2023', 'MM/DD/YYYY'),
'9279689068045021', 8, 3);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (9, TO_DATE('11/11/2023', 'MM/DD/YYYY'),
'4002158299984822', 9, 2);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (10, TO_DATE('11/13/2023', 'MM/DD/YYYY'),
'5769850775546851', 10, 2);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (11, TO_DATE('11/16/2023', 'MM/DD/YYYY'),
'1635375209274466', 11, 5);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (12, TO_DATE('11/19/2023', 'MM/DD/YYYY'),
'7967389041059884', 12, 5);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (13, TO_DATE('11/20/2023', 'MM/DD/YYYY'),
'3252814464085864', 13, 6);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (14, TO_DATE('11/21/2023', 'MM/DD/YYYY'),
'1575499649453264', 14, 4);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (15, TO_DATE('11/16/2023', 'MM/DD/YYYY'),
'8407612688356883', 15, 5);
```

```

INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (16, TO_DATE('11/18/2023', 'MM/DD/YYYY'),
'7483665849065060', 16, 8);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (17, TO_DATE('11/17/2023', 'MM/DD/YYYY'),
'7728705484790868', 17, 5);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (18, TO_DATE('11/20/2023', 'MM/DD/YYYY'),
'9414730357026336', 18, 3);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (19, TO_DATE('11/16/2023', 'MM/DD/YYYY'),
'2495898899739702', 19, 7);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (20, TO_DATE('11/17/2023', 'MM/DD/YYYY'),
'7173884435759535', 20, 5);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (21, TO_DATE('11/18/2023', 'MM/DD/YYYY'),
'9816574641576445', 15, 7);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (22, TO_DATE('11/19/2023', 'MM/DD/YYYY'),
'5378327876357835', 18, 8);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (23, TO_DATE('11/20/2023', 'MM/DD/YYYY'),
'7837453787534873', 19, 5);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (24, TO_DATE('11/21/2023', 'MM/DD/YYYY'),
'7832453787537837', 20, 9);
INSERT INTO jc_payment (payment_id, payment_date, card_no, invoice_id,
card_type_id) VALUES (25, TO_DATE('11/22/2023', 'MM/DD/YYYY'),
'7854563783735743', 20, 5);

```

h) COUNT(*) Query and Result

```

SELECT COUNT(*) AS total_jc_discount
FROM jc_discount;

SELECT COUNT(*) AS total_discount_corp
FROM discount_corp;

SELECT COUNT(*) AS total_discount_indi
FROM discount_indi;

```

```
SELECT COUNT(*) AS total_jc_service  
FROM jc_service;
```

```
SELECT COUNT(*) AS total_corporate  
FROM corporate;
```

```
SELECT COUNT(*) AS total_individual  
FROM individual;
```

```
SELECT COUNT(*) AS total_jc_customer  
FROM jc_customer;
```

```
SELECT COUNT(*) AS total_jc_vehicle  
FROM jc_vehicle;
```

```
SELECT COUNT(*) AS total_jc_vehicle_class  
FROM jc_vehicle_class;
```

```
SELECT COUNT(*) AS total_jc_loc  
FROM jc_loc;
```

```
SELECT COUNT(*) AS total_jc_invoice  
FROM jc_invoice;
```

```
SELECT COUNT(*) AS total_jc_payment  
FROM jc_payment;
```

```
SELECT COUNT(*) AS total_jc_card_type  
FROM jc_card_type;
```

TOTAL_JC_DISCOUNT

20

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TOTAL_DISCOUNT_CORP

10

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TOTAL_DISCOUNT_INDI

10

Download CSV

TOTAL_JC_SERVICE

20

Download CSV

TOTAL_CORPORATE

10

Download CSV

TOTAL_INDIVIDUAL

10

Download CSV

TOTAL_JC_CUSTOMER

20

Download CSV

TOTAL_JC_VEHICLE

20

Download CSV

TOTAL_JC_VEHICLE_CLASS

10

Download CSV

TOTAL_JC_LOC

10

Download CSV

TOTAL_JC_INVOICE

20

Download CSV

TOTAL_JC_PAYMENT

25

Download CSV

TOTAL_JC_CARD_TYPE

10

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i) Data Dictionary Queries

```
SELECT table_name, column_name, data_type, data_length, nullable
FROM user_tab_columns;
```

TABLE_NAME	COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE
CORPORATE	CUST_ID	NUMBER	22	N
CORPORATE	EMP_ID	NUMBER	22	N
CORPORATE	CORP_NAME	VARCHAR2	30	N
CORPORATE	REG_NO	VARCHAR2	9	N
DISCOUNT_CORP	DISCOUNT_ID	NUMBER	22	N
DISCOUNT_CORP	DISC_PERC	NUMBER	22	N
DISCOUNT_CORP	CORP_NAME	VARCHAR2	30	N
DISCOUNT_INDI	DISCOUNT_ID	NUMBER	22	N
DISCOUNT_INDI	DISC_PERC	NUMBER	22	N
DISCOUNT_INDI	START_DATE	DATE	7	N
DISCOUNT_INDI	END_DATE	DATE	7	N
INDIVIDUAL	CUST_ID	NUMBER	22	N
INDIVIDUAL	DRV_LICENSE_NO	VARCHAR2	12	N
INDIVIDUAL	INS_CMP_NAME	VARCHAR2	30	N
INDIVIDUAL	INS_POL_NO	VARCHAR2	13	N
JC_CARD_TYPE	CARD_TYPE_ID	NUMBER	22	N
JC_CARD_TYPE	TYPE_NAME	VARCHAR2	30	N
JC_CUSTOMER	CUST_ID	NUMBER	22	N
JC_CUSTOMER	FNAME	VARCHAR2	30	N
JC_CUSTOMER	LNAME	VARCHAR2	30	N
JC_CUSTOMER	STREET	VARCHAR2	30	N
JC_CUSTOMER	CITY	VARCHAR2	20	N
JC_CUSTOMER	STATE	VARCHAR2	30	N
JC_CUSTOMER	ZIPCODE	VARCHAR2	10	N
JC_CUSTOMER	PHONE_NO	VARCHAR2	12	N
JC_CUSTOMER	EMAIL	VARCHAR2	50	N
JC_CUSTOMER	CUST_TYPE	VARCHAR2	1	N
JC_CUSTOMER	SERVICE_ID	NUMBER	22	N
JC_DISCOUNT	DISCOUNT_ID	NUMBER	22	N
JC_DISCOUNT	DISCOUNT_TYPE	VARCHAR2	1	N
JC_INVOICE	INVOICE_ID	NUMBER	22	N
JC_INVOICE	INVOICE_DATE	DATE	7	N
JC_INVOICE	INVOICE_AMOUNT	NUMBER	22	N
JC_INVOICE	SERVICE_ID	NUMBER	22	N
JC_LOC	LOC_ID	NUMBER	22	N
JC_LOC	STREET	VARCHAR2	30	N
JC_LOC	CITY	VARCHAR2	30	N
JC_LOC	STATE	VARCHAR2	30	N
JC_LOC	ZIPCODE	VARCHAR2	10	N
JC_LOC	PHONE_NO	VARCHAR2	12	N
JC_PAYMENT	PAYMENT_ID	NUMBER	22	N
JC_PAYMENT	PAYMENT_DATE	DATE	7	N
JC_PAYMENT	CARD_NO	NUMBER	22	N
JC_PAYMENT	INVOICE_ID	NUMBER	22	N
JC_PAYMENT	CARD_TYPE_ID	NUMBER	22	N
JC_SERVICE	SERVICE_ID	NUMBER	22	N
JC_SERVICE	DAYS_NO	NUMBER	22	N
JC_SERVICE	START_ODD	NUMBER	22	N
JC_SERVICE	END_ODD	NUMBER	22	N
JC_SERVICE	PICKUP_LOC	NUMBER	22	N

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Rows 1 - 50. More rows exist.

```
SELECT table_name, constraint_name, column_name
FROM user_cons_columns
WHERE constraint_name IN (SELECT constraint_name FROM user_constraints
WHERE constraint_type = 'P');
```

TABLE_NAME	CONSTRAINT_NAME	COLUMN_NAME
CORPORATE	CORPORATE_PK	CUST_ID
DISCOUNT_CORP	DISCOUNT_CORP_PK	DISCOUNT_ID
DISCOUNT_INDI	DISCOUNT_INDI_PK	DISCOUNT_ID
INDIVIDUAL	INDIVIDUAL_PK	CUST_ID
JC_CARD_TYPE	JC_CARD_TYPE_PK	CARD_TYPE_ID
JC_CUSTOMER	JC_CUSTOMER_PK	CUST_ID
JC_DISCOUNT	JC_DISCOUNT_PK	DISCOUNT_ID
JC_INVOICE	JC_INVOICE_PK	INVOICE_ID
JC_LOC	JC_LOC_PK	LOC_ID
JC_PAYMENT	JC_PAYMENT_PK	PAYMENT_ID
JC_SERVICE	JC_SERVICE_PK	SERVICE_ID
JC_VEHICLE_CLASS	JC_VEHICLE_CLASS_PK	VEHICLE_ID
JC_VEHICLE	JC_VEHICLE_PK	VEHICLE_VIN

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13 rows selected.

```

SELECT table_name, constraint_name, column_name
FROM user_cons_columns
WHERE constraint_name IN (SELECT constraint_name FROM user_constraints
WHERE constraint_type = 'R');

```

TABLE_NAME	CONSTRAINT_NAME	COLUMN_NAME
CORPORATE	CORPORATE_JC_CUSTOMER_FK	CUST_ID
DISCOUNT_CORP	DISCOUNT_CORP_JC_DISCOUNT_FK	DISCOUNT_ID
DISCOUNT_INDI	DISCOUNT_INDI_JC_DISCOUNT_FK	DISCOUNT_ID
INDIVIDUAL	INDIVIDUAL_JC_CUSTOMER_FK	CUST_ID
JC_CUSTOMER	JC_CUSTOMER_JC_SERVICE_FK	SERVICE_ID
JC_INVOICE	JC_INVOICE_JC_SERVICE_FK	SERVICE_ID
JC_PAYMENT	JC_PAYMENT_JC_CARD_TYPE_FK	CARD_TYPE_ID
JC_PAYMENT	JC_PAYMENT_JC_INVOICE_FK	INVOICE_ID
JC_SERVICE	JC_SERVICE_JC_DISCOUNT_FK	DISCOUNT_ID
JC_SERVICE	JC_SERVICE_JC_LOC_FK	PICKUP_LOC
JC_SERVICE	JC_SERVICE_JC_LOC_FKV2	DROPOFF_LOC
JC_VEHICLE_CLASS	JC_VEHICLE_CLASS_JC_SERVICE_FK	SERVICE_ID
JC_VEHICLE	JC_VEHICLE_JC_LOC_FK	LOC_ID
JC_VEHICLE	JC_VEHICLE_JC_VEHICLE_CLASS_FK	VEHICLE_ID

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14 rows selected.

```

SELECT table_name, column_name, comments
FROM user_col_comments;

```

TABLE_NAME	COLUMN_NAME	COMMENTS
CORPORATE	CUST_ID	customer id
CORPORATE	EMP_ID	Employee ID of the customer who rents the car on a corporate account
CORPORATE	CORP_NAME	details of corporation name
CORPORATE	REG_NO	registration number of the corporation
DISCOUNT_CORP	DISCOUNT_ID	discount id
DISCOUNT_CORP	DISC_PERC	percentage of discount offered for corporation
DISCOUNT_CORP	CORP_NAME	corporation name
DISCOUNT_INDI	DISCOUNT_ID	discount id
DISCOUNT_INDI	DISC_PERC	percentage of discount offered for individual
DISCOUNT_INDI	START_DATE	discount coupon start date
DISCOUNT_INDI	END_DATE	discount coupon end date
INDIVIDUAL	CUST_ID	customer id
INDIVIDUAL	DRV_LICENSE_NO	Driver License Number
INDIVIDUAL	INS_CMP_NAME	Insurance Company Name
INDIVIDUAL	INS_POL_NO	Insurance Policy Number
JC_CARD_TYPE	CARD_TYPE_ID	CARD TYPE ID
JC_CARD_TYPE	TYPE_NAME	card type name
JC_CUSTOMER	CUST_ID	customer id
JC_CUSTOMER	FNAME	customer first name
JC_CUSTOMER	LNAME	customer last name
JC_CUSTOMER	STREET	customer street
JC_CUSTOMER	CITY	customer city
JC_CUSTOMER	STATE	customer state
JC_CUSTOMER	ZIPCODE	customer zipcode
JC_CUSTOMER	PHONE_NO	customer phone number
JC_CUSTOMER	EMAIL	customer email
JC_CUSTOMER	CUST_TYPE	customer type
JC_CUSTOMER	SERVICE_ID	service_id
JC_DISCOUNT	DISCOUNT_ID	discount id
JC_DISCOUNT	DISCOUNT_TYPE	discount type
JC_INVOICE	INVOICE_ID	Invoice id
JC_INVOICE	INVOICE_DATE	INVOICE DATE
JC_INVOICE	INVOICE_AMOUNT	INVOICE AMOUNT
JC_INVOICE	SERVICE_ID	service id
JC_LOC	LOC_ID	office location
JC_LOC	STREET	office location street
JC_LOC	CITY	office location city
JC_LOC	STATE	office location state
JC_LOC	ZIPCODE	office location zipcode
JC_LOC	PHONE_NO	office phone number
JC_PAYMENT	PAYMENT_ID	PAYMENT ID
JC_PAYMENT	PAYMENT_DATE	PAYMENT DATE
JC_PAYMENT	CARD_NO	card number
JC_PAYMENT	INVOICE_ID	invoice id
JC_PAYMENT	CARD_TYPE_ID	card type id
JC_SERVICE	SERVICE_ID	rent service id
JC_SERVICE	DAYS_NO	rent service days number
JC_SERVICE	START_ODO	rent service start odometer
JC_SERVICE	END_ODO	rent service end odometer
JC_SERVICE	PICKUP_LOC	pickup location
Download CSV		
Rows 1 - 50. More rows exist.		