**Car Rental SQL sheet**

**Table Creation Order:**

1. **Location**
2. **Employee**
3. **Product**
4. **Car\_Category**
5. **Car**
6. **Car\_insurance**
7. **Liability\_Insurance**
8. **Customer**
9. **Payment\_Method**
10. **Orders**
11. **Order\_line**
12. **Payment**

**Create Tables Implementation:**

Create table Location

(

Location\_ID int NOT NULL,

Street varchar(50),

City varchar(25),

State varchar(2),

Zip varchar(5),

Primary key (Location\_ID)

);

Create table Employee

(

Emp\_ID int NOT NULL,

Emp\_Fname varchar(25),

Emp\_Lname varchar(25),

Title varchar(30),

Emp\_Phone varchar(12),

Location\_ID int,

Primary key (Emp\_ID),

Foreign key (Location\_ID) references Location(Location\_ID)

);

Create table Product

(

Product\_ID int NOT NULL,

Description varchar(250),

Primary key (Product\_ID)

);

Create table Car\_Category

(

Category\_ID int NOT NULL,

Category\_Name varchar(25),

Price\_Per\_Day float,

Primary key (Category\_ID)

);

Create table Car

(

Car\_ID int NOT NULL,

Category\_ID int,

Product\_ID int NOT NULL,

Car\_Status int,

VIN\_Number varchar(17),

Car\_year int,

Brand varchar(30),

Model varchar(30),

Color varchar(30),

Mileage float,

Location\_ID int NOT NULL,

Primary key (Car\_ID),

Foreign key (Product\_ID) references Product(Product\_ID),

Foreign key (Category\_ID) references Car\_Category(Category\_ID),

Foreign key (Location\_ID) references Location(Location\_ID)

);

Create table Car\_Insurance

(

Car\_Insu\_ID int NOT NULL,

Category\_ID int,

Product\_ID int NOT NULL,

Description varchar(250),

Price\_Per\_Day float,

Primary key (Car\_Insu\_ID),

Foreign key (Product\_ID) references Product(Product\_ID),

Foreign key (Category\_ID) references Car\_Category(Category\_ID)

);

Create table Liability\_Insurance

(

Lia\_Insu\_ID int NOT NULL,

Product\_ID int NOT NULL,

Description varchar(250),

Price\_Per\_Day float,

Primary key (Lia\_Insu\_ID),

Foreign key (Product\_ID) references Product(Product\_ID)

);

Create table Customer

(

Cus\_ID int NOT NULL,

Cus\_Fname varchar(25),

Cus\_Lname varchar(25),

Cus\_Address varchar(50),

Cus\_Phone varchar(12),

Cus\_Email varchar(25),

Drive\_License\_Num varchar(15),

Drive\_License\_Date datetime,

Primary key (Cus\_ID)

);

Create table Payment\_Method

(

PayM\_ID int NOT NULL,

Cus\_ID int,

Type varchar(50),

Card\_No varchar(25),

Expire\_Date datetime,

Name\_On\_Card varchar(50),

Billing\_Address varchar(50),

Primary key (PayM\_ID),

Foreign key (Cus\_ID) references Customer(Cus\_ID)

);

Create table Orders

(

Order\_ID int NOT NULL,

Cus\_ID int,

Order\_Status varchar(20),

Emp\_ID int,

Pick\_Location\_ID int,

Drop\_Location\_ID int,

Start\_Time datetime,

Due\_Time datetime,

Return\_Time datetime,

Total\_Cost float,

Primary key (Order\_ID),

Foreign key (Cus\_ID) references Customer(Cus\_ID),

Foreign key (Emp\_ID) references Employee(Emp\_ID),

Foreign key (Pick\_Location\_ID) references Location(Location\_ID),

Foreign key (Drop\_Location\_ID) references Location(Location\_ID)

);

Create table Order\_line

(

Order\_Line\_ID int NOT NULL,

Order\_ID int,

Product\_ID int,

Line\_NUmber int,

Price\_Per\_Day float,

Price\_Per\_Line float,

Primary key (Order\_Line\_ID),

Foreign key (Order\_ID) references Orders(Order\_ID),

Foreign key (Product\_ID) references Product(Product\_ID)

);

Create table Payment

(

Payment\_ID int NOT NULL,

PayM\_ID int,

Order\_ID int NOT NULL,

Payment\_Date datetime,

Amount float,

Primary key (Payment\_ID),

Foreign key (Order\_ID) references Orders(Order\_ID),

Foreign key (PayM\_ID) references Payment\_Method(PayM\_ID),

Foreign key (Invoice\_ID) references Invoice(Invoice\_ID)

);

**Sample Data Test:**

Insert into Car\_Category values('01', 'Compact', '14.99');

Insert into Car\_Category values('02', 'Sub-compact', '12.99');

Insert into Car\_Category values('03', 'Hybrid', '16.99');

Insert into Location values('1', '31093 Warren Ave.', 'Santa Clara', 'CA', '95054');

Insert into Location values('2', '10 Union Square', 'Union City', 'CA', '94109');

Insert into Location values('3', '67765 Hyde St.', 'San Fransisco', 'CA', '94587');

Insert into Product values('3011', 'Car', '14.99');

Insert into Car values('001', '01', '3011', 'AV', '87f403v5K09', '2016-2-1', 'BMW', '3 Series Sedan (F30) LCI', 'Mediterranean Blue', '12386', '1');

**Sample Data:**

**Car\_Category**

insert into Car\_Category values(1, 'Small Car', 10,20);

insert into Car\_Category values(2, 'Family Car',14, 30);

insert into Car\_Category values(3, 'Van', 6,40);

**Car\_Insurance**

Car\_Insurance(Car\_Insu\_ID,Category\_ID,Description,Product\_ID,Price\_Per\_Day)

Insert into Car\_Insurance values (1, 1, 1,'Insurance for small car', 20);

Insert into Car\_Insurance values (2, 2, 2, 'Insurance for family car', 25);

Insert into Car\_Insurance values (3, 3, 3, 'Insurance for VAN', 30);

**Location** (really no San Jose or Santa Clara? Make someone sad ;) ahaha lol) Literally, the renting offices does not need to be matched with customer’s places coz we are renting the cars only not places so we are safe. :D

insert into Location values (1, '1234 Davis St', 'Fremont', 'CA', 94539);

insert into Location values (2, '4567 Crawdad Ct', 'Union City', 'CA', 94544);

insert into Location values (3, '1220 Tasman Dr', 'Sunnyvale', 'CA', 94043);

insert into Location values (4, '4238 Cherry Lane', 'Milpitas', 'CA', 95035);

insert into Location values (5, '9753 Franklin Street', 'San Francisco', 'CA', 94102);

Insert into Location values(6, '1000 Metro Ctr Blvd', 'Foster City', 'CA’, '94404');

**Employee**

insert into Employee values (01, 'Lewis', 'Rhonda', 'Rental Specialist', '408-324-4472','1');

insert into Employee values (02, 'VanDam', 'Rhett', 'Manager', '408-675-899','1');

insert into Employee values (03, 'Jones', 'Anne', 'Rental Specialist', '408-898-3456','2');

insert into Employee values (04, 'Lange', 'John', 'Manager', '408-504-4430','2');

insert into Employee values (05, 'Williams', 'Robert', 'Rental Specialist', '408-890-3220','3');

insert into Employee values (06, 'Smith', 'Jeanine', 'Manager', '408-324-7883','3');

insert into Employee values (07, 'Diante','Jorg', 'Rental Specialist', '408-890-4567','4');

insert into Employee values (08, 'Wiesenbach', 'Pau', 'Manager', '408-897-4358','4');

insert into Employee values (09, 'Smith', 'George', 'Rental Specialist', '408-504-3339','5');

insert into Employee values (10, 'Smythe', 'Melanie', 'Manager', '408-569-0093','5');

insert into Employee values (11, 'Washington', 'Rupert', 'Rental Specialist', '408-890-4925','6');

insert into Employee values (12, 'Johnson', 'Edward', 'Manager', '408-898-4387','6');

**Car** (vin number need to be 17 letters also product id need to be changed later according to product table) (created table does have VIN\_Number varchar(17)? As 4 product\_Id, okay we all take care of later? ^\_^) Ps man we have some really new cars 4 mileage to be 300 mi (XD)) we are really doing business including our own cars. Moreover, we are charging them way more “expensive” so it needs to be new car ;P

(Car\_ID, Category\_ID,Product\_ID, Car\_Status, Vin\_number, Car\_year, Brand, Model, Color, Mileage, Location\_ID)

insert into Car values (1, 2, 5, 1, 'hh293ty9023587899', 2015, 'Ford', 'Escape', ' Silver', 2000, 3);

(Sample)

insert into Car values (1, 2, 6, 1, 'hh293ty9023587899', 2015, 'Ford', 'Escape', ' Silver', 2000, 3);

insert into Car values (2, 1, 7, 1, 'hh287ty903798645', 2016, 'Honda', 'Sedan', ' White', 1500, 4);

insert into Car values (3, 2, 8, 1, 'kk993uv901232164', 2015, 'Chevrolet', 'Express', ' Grey', 2100, 1);

insert into Car values (4, 1, 9, 1, 'qs763pb5617643134', 2015, 'Chevrolet', 'Cruze', ' Silver', 3200, 5);

insert into Car values(5, 2, 10, 1, 'hh654ou6984635294', 2015, 'Ford', 'Fusion', ' Red', 1100, 2);

insert into Car values (6, 2, 11, 1, 'hh287ty9034415215', 2016, 'Honda', 'Sedan', ' White', 1500, 4);

insert into Car values (7, 1, 12, 1, 'hh287ty904352345', 2016, 'Honda', 'Fit', ' Grey', 4600, 1);

insert into Car values (8, 3, 13, 1, 'ax967ry3249182357', 2016, 'Honda', 'Pilot', ' Black', 5400, 3);

insert into Car values (9, 2, 14, 1, 'ps342ew3246976121', 2017, 'Honda', 'Accord', ' Grey', 500, 2);

insert into Car values (10, 3, 15, 1, 'rs967iuy326162398', 2015, 'Honda', 'Odyssey', 'Red', 4500, 5);

insert into Car values (11, 3, 16, 1, 'zz968cv9192837654', 2016, 'Nissan', 'Quest', ' Grey', 300, 4);

insert into Car values (12, 3, 17, 1, 'bn845vb9661830397', 2016, 'Toyota', 'Hiace', ' Blue', 380, 4);

insert into Car values (13, 1, 18, 1, 'wauefaflidn046597', 2015, 'Audi', 'S4', 'Red', 8000, 4);

insert into Car values (14, 2, 19, 1, 'yv1mw665982422088', 2016, 'Volvo', 'V50', 'White', 5300, 3);

insert into Car values (15, 2, 20, 1, '1fmdu34x9nud16684', 2015, 'Ford', 'Explorer', 'Silver', 9200, 3);

insert into Car values (16, 1, 21, 1, 'wddug8fb6fa165922', 2017, 'Mercedes-Benz', 'S-class Sedan', 'Silver', 200, 3);

insert into Car values (17, 1, 22, 1, 'wvwzzz3czge015858', 2014, 'Volkswagen', 'passat', 'Silver', 12000, 3);

insert into Car values (18, 1, 23, 1, '3vwpl7aj2bm708009', 2014, 'Volkswagen', 'Jetta/Golf GTI', 'Silver', 13100, 3);

insert into Car values (19, 3, 24, 1, '1gnek13rxtj000000', 2014, 'Chevrolet', 'Silverado 1500 LT/LTZ/WT', 'Silver', 13100, 3);

Insert into Car values(20, 1, 25, 1, '1kubo86tkqb372856', 2016, 'Kia', 'Optima SX', 'Snow Pearl White', '20541', 2);

Insert into Car values(21, 2, 26, 1, '1g1bn69z1fy116647', 2017, 'Hyundai', 'Sonata Eco', 'Lakeside Blue', 11690, 1);

Insert into Car values(22, 1, 27, 1, '2d8hn44p68r711594', 2017, 'Chevrolet', 'Bolt EV', 'Orange Burst Metallic', 5385, 1);

Insert into Car values(23, 3, 28, 1, '1gcwgfba2c1169403', 2016, 'Kia', 'Sedona', 'Dark Cherry', 5385, 1);

Insert into Car values(24, 2, 29, 1, '2hges16523h548639', '2015', 'Tesla', 'Model S', 'Blue Metallic', 18334, 1);

Insert into Car values(25, 1, 30, 1, 'wba3a5c52df356612','2017', 'Toyota', 'Prius Prime', 'Hypersonic Red', 2093, 2);

Insert into Car values(26, 2, 31, 1, 'jthfn48y120030235', '2014', 'Ford', 'Focus', 'Tuxedo Black Metallic', 4440, 3);

Insert into Car values(27, 2, 32, 1, '2hnyd18875h514237', '2015', 'Ford', 'Focus', 'Race Red', 6049, 3);

Insert into Car values(28, 2, 33, 1, '1fuw3lya5nh516114', '2016', 'Scion', 'iA', 'Frost White', 12876, 4);

Insert into Car values(29, 2, 34, 1, 'wdbtk72f87t080737', '2016', 'Chevrolet', 'Camaro', 'Bright Yellow', '30642', 1);

Insert into Car values(30, 2, 35, 1, '2cndl63fx66093066', '2016', 'Alfa Romeo', 'Giulia', 'Alfa White', 2701, 2);

**Customer**

insert into Customer values (1, 'Michael','Philip', '1234 N First St San Jose', '4083459876','mphilip@mail.com','b4321456', '2018-11-02');

insert into Customer values (2, 'Lily','Mei', '4567 Deerfield Ter Fremont', '5108976543','lily@mail.com','b1452156', '2019-11-06');

insert into Customer values (3, 'Angela','Wong', '34 Nile St Union City', '4150987645','wong@gmail.com','g987456', '2018-01-08');

insert into Customer values (4, 'James','Black', '4432 Plum St San Jose', '4080769812','jblack@gmail.com', 'f982019', '2017-11-15');

insert into Customer values (5, 'Rachael','Philip', '4329 W Second St San Jose', '4083454321','rphilip@mail.com','u8931456', '2018-11-02');

insert into Customer values (6, 'Christina','Underwood', '4568 Franklin St Milpitas', '6257695432','cwood@mail.com','k1456123', '2019-02-22');

insert into Customer values (7, 'Vicky','Drobot', '453 N First St San Jose', '6254555431','vicky@gmail.com','v9456183', '2019-02-22');

insert into Customer values (8, 'Simon','Chan', '4928 Blacow Rd Fremont', '5109872345','schan@mail.com','h142982', '2019-02-28');

insert into Customer values (9, 'Ray','Enstrom', '879 College Ave Santa Clara', '4088972345','enstrom@gmail.com','t6529014', '2019-12-01');

insert into Customer values (10, 'Richard','Carmona', '8128 Concord St San Francisco', '4159876123','rca@hotmail.com','r712934', '2018-10-12');

insert into Customer values (11, 'Kristen','Fisherman', '356 Dolphin Isle Foster City', '6257698345','kfish@mail.com','f1786123', '2018-08-18');

insert into Customer values (12, 'Charles','Dickens', '879 Oak Park Dr San Francisco’', '6258972987','charles@gmail.com','d6874014', '2019-07-30');

insert into Customer values (13, 'Rick','Martin', '5870 Alberta Ave Sunnyvale', '4087689231','martin@gmail.com','m198362', '2018-03-30’');

insert into Customer values (14, 'John','Bowman', '809 Beach Blvd Foster City', '6502419345','bman@mail.com','j1791253', '2018-05-30');

insert into Customer values (15, 'Chris','Booras', '8756 Garden St Milpitas', '6255768356','cb@gmail.com','c6729193', '2019-01-30');

insert into Customer values (16, 'Samir','Magid', '3000 Mission College Blvd Santa Clara', '4080699352','Samir.Magid@wvm.edu','y9c84002', '2018-7-22');

Our professor is gonna renting the car from us?? We need to make sure we give him a discount. :)

**Payment\_Method**

insert into Payment\_Method values (1, 1, 'Chase', '4321948729496876', '2018-10-30', 'Michael V Philip', '1234 N First St San Jose');

insert into Payment\_Method values (2, 2, 'AMEX', '4321986437818923', '2018-11-30', 'Lily Mei', '4569 Deerfield Ter Fremont');

insert into Payment\_Method values (3, 3, 'Discover', '4986986437843657', '2018-11-30', 'James Black', '4432 Plum St San Jose');

insert into Payment\_Method values (4, 4, 'Capital One', '4986986398843676', '2018-01-31', 'Angela Wong', '4329 W Second St San Jose');

insert into Payment\_Method values (5, 5, 'AMEX', '4321986421348970', '2018-11-30', 'Rachel Philip', '4329 W Second St San Jose');

insert into Payment\_Method values (6, 6, 'Discover', '4986983211843219', '2017-11-30', 'Christina Underwood', '4568 Franklin St Milpitas');

insert into Payment\_Method values (7, 7, 'Chase', '4321956429496876', '2018-01-30', 'Vicky Drobot', '453 N First St San Jose');

insert into Payment\_Method values (8, 8, 'Capital One', '4986437898843123', '2018-04-30', 'Simon Chan', '4928 Blacow Rd Fremont');

insert into Payment\_Method values (9, 9, 'Discover', '4986652443784347', '2017-11-30', 'Ray Enstrom','879 College Ave Santa Clara');

insert into Payment\_Method values (10, 10, 'Visa', '4423956425236887', '2019-09-30', 'Richard Carmona', '8128 Concord St San Francisco');

insert into Payment\_Method values (11, 11, 'Capital One', '4986765898843123', '2018-08-30', 'Kristen Fisherman', '356 Dolphin Isle Foster City');

insert into Payment\_Method values (12, 12, 'Visa', '44239563948369669', '2019-11-30', 'Charles Dickens', '879 Oak Park Dr San Francisco');

insert into Payment\_Method values (13, 13, 'Discover', '4986314243788951', '2018-12-30', 'Rick Martin','5870 Alberta Ave Sunnyvale');

insert into Payment\_Method values (14, 14, 'Chase', '4983218988491827', '2018-08-30', 'John Bowman’, ‘809 Beach Blvd Foster City');

insert into Payment\_Method values (15, 15, 'Visa', '4423983211198239', '2019-05-30', 'Chris Booras', '8756 Garden St Milpitas');

insert into Payment\_Method values (16, 16, 'Discover', '4986329137849892', '2018-11-30', 'Samir Magid', '3000 Mission College Blvd Santa Clara');

**Liability\_Insurance**

Insert into Liability\_Insurance values (1, 4, 'Standard Supplemental Liability Protection', '10.95');

Insert into Liability\_Insurance values (2, 5, 'Premium Supplemental Liability Protection', '14.95');

**Product**

Insert into Product values (1, 'Car Insurance Small');

Insert into Product values (2, 'Car Insurance Family');

Insert into Product values (3, 'Car Insurance Van');

Insert into Product values (4, 'Liability Insurance Standard Protection');

Insert into Product values (5, 'Liability Insurance Premium Protection');

Insert into Product values (6, 'Family Car');

Insert into Product values (7, 'Small Car');

Insert into Product values (8, 'Family Car');

Insert into Product values (9, 'Small Car');

Insert into Product values (10, 'Family Car');

Insert into Product values (11, 'Family Car');

Insert into Product values (12, 'Small Car');

Insert into Product values (13, 'Van');

Insert into Product values (14, 'Family Car');

Insert into Product values (15, 'Van');

Insert into Product values (16, 'Family Car');

Insert into Product values (17, 'Small Car');

Insert into Product values (18, 'Small Car');

Insert into Product values (19, 'Van');

Insert into Product values (20, 'Small Car');

Insert into Product values (21, 'Family Car');

Insert into Product values (22, 'Small Car');

Insert into Product values (23, 'Van');

Insert into Product values (24, 'Small Car');

Insert into Product values (25, 'Small Car');

Insert into Product values (26, 'Small Car');

Insert into Product values (27, 'Family Car');

Insert into Product values (28, 'Family Car');

Insert into Product values (29, 'Family Car');

Insert into Product values (30, 'Family');

Insert into Product values (31, 'Family Car');

Insert into Product values (32, 'Family Car');

Insert into Product values (33, 'Family Car');

Insert into Product values (34, 'Family Car');

Insert into Product values (35, 'Family Car');

**Orders**

(Order\_ID, Cus\_ID, Order\_status, Emp\_ID, pick\_up ID, Dropoff ID, start, due, return, totalcost)

Insert into Orders values(1, 1, 'complete', 1, 3, 4, '2017-05-08', '2017-05-10', '2017-05-10',101.90); // small car insurance & standard protection

Insert into Orders values (2, 2, ‘in process’, 1, 4, 4, ‘2017-05-07’, ‘2017-05-09’, ’ 2017-05-09’, null);

Insert into Orders values (3, 3, ‘in process’, 3, 2, 1, ‘2017-05-15’, ‘2017-05-20’, ’ 2017-05-20’, NULL);

Insert into Orders values (4, 4, ‘complete’, 3, 4, 3, ‘2017-05-01’, ‘2017-05-09’, ’ 2017-05-09’, NULL);

Insert into Orders values (5, 5, ‘reserved’, 5, 1, 1, ‘2017-05-20’, ‘2017-05-27’, ’ 2017-05-27’, NULL);

Insert into Orders values (6, 15, ‘reserved’, 3, 4, 3, ‘2017-06-01’, ‘2017-06-09’, ’ 2017-06-09’, NULL);

Insert into Orders values (7, 18, ‘in process’, 7, 3, 3, ‘2017-05-15’, ‘2017-05-30’, ’ 2017-05-30’, NULL);

Insert into Orders values (8, 21, ‘reserved’, 9, 3, 3, ‘2017-05-2’, ‘2017-05-27’, ’ 2017-05-27’, NULL);

Insert into Orders values (9, 23, ‘in process’, 5, 2, 2, ‘2017-05-20’, ‘2017-05-27’, ’ 2017-05-27’, NULL);

**Order\_Line**

(order\_Line\_ID, Order\_ID, Product\_ID, Line\_Number, Cost\_Per\_Line)

Insert into Order\_line values (1, 1, 1, 1, 20, '40.00'); /\* small car insurance\*/

Insert into Order\_line values (2, 1, 4, 2, 10.99, '21.90'); /\*liability standard protection\*/

Insert into Order\_line values (3, 1, 7, 3, 20, '40.00'); /\*small car 2 days times $20 per day\*/

Insert into Order\_line values(4, 2, 6, 1, ‘30.00’, NULL); /\* family car\*/

Insert into Order\_Line values(5, 2, 4, 2, ‘10.95’, NULL); /\* liability standard protection \*/

**Payment**

--(Payment\_ID int NOT NULL, PayM\_ID int, Order\_ID int NOT NULL, Invoice\_ID int, Inv\_Date datetime, Amount float)

Insert into Payment values (1, 1, 1, 2017-05-10, 70.99);