

A2Z Car-showroom

July 29, 2023

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1 INTRODUCTION

Welcome to A2Z Car-showroom Project

A2Z Car-showroom is a cutting-edge automotive management system built on the powerful Oracle SQL platform. Our project aims to revolutionize the car dealership experience by providing a comprehensive and user-friendly solution for car showrooms. Whether you are a car dealer, salesperson, or customer, A2Z Car-showroom offers seamless interactions, streamlined inventory management, and enhanced customer engagement.

With Oracle SQL at its core, our project ensures a robust and scalable database architecture, enabling efficient data handling and real-time analytics. From managing vehicle inventory, tracking sales, handling customer inquiries, to generating insightful reports, A2Z Car-showroom optimizes the entire sales process, empowering businesses to thrive in today's competitive automotive industry.

Join us on this journey as we elevate the car showroom experience, from A to Z, and take your automotive business to new heights with our innovative Oracle SQL-powered solution. Let's drive success together with A2Z Car-showroom Project!

2 SCENARIO

Welcome to the world of A2Z, where we are dedicated to creating an exceptional car showroom experience for our valued customers. To achieve this, we have developed a state-of-the-art database system that seamlessly integrates all aspects of our showroom operations.

Our database comprises eight entities, each carefully designed to enhance efficiency and convenience:

The Showroom entity features a unique Showroom ID, Showroom Name, Location, and Car Holding Capacity, ensuring each showroom's distinct identity and easy access for our customers.

The Car entity is equipped with a unique Car ID, Showroom ID, Make, Model, Year, and Price, offering a diverse selection of high-quality cars that cater to different preferences and budgets.

The Customer entity includes a personalized Customer ID, Name, Email, and Phone Number, enabling us to provide a warm and personalized interaction with our esteemed customers.

Within our showroom, we have a team of skilled employees, and the Employee entity captures their Employee ID, Name, Role, and Showroom ID, promoting teamwork and efficient operations.

When a customer decides to purchase a car, the Car Order entity records the Order ID, Customer ID, Car ID, Order Date, and Delivery Date, ensuring a seamless and timely buying process.

For each transaction, the Car Transaction entity includes a Transaction ID, Employee ID, Car ID, Transaction Date, and Amount, guaranteeing secure and transparent dealings.

We value our customers' feedback, and the Car Review entity captures Review ID, Customer ID, Car ID, Rating, and Review Text, guiding potential buyers and inspiring continuous improvement.

To complement our cars, the Car Accessory entity features Accessory ID, Car ID, Accessory Name, and Price, allowing customers to customize their driving experience.

At A2Z, our meticulously designed database is the backbone of our commitment to delivering an unparalleled car showroom experience. With our dedicated team of employees ready to assist, we invite you to explore the world of A2Z, where your automotive dreams come to life.

3 ER-DIAGRAM

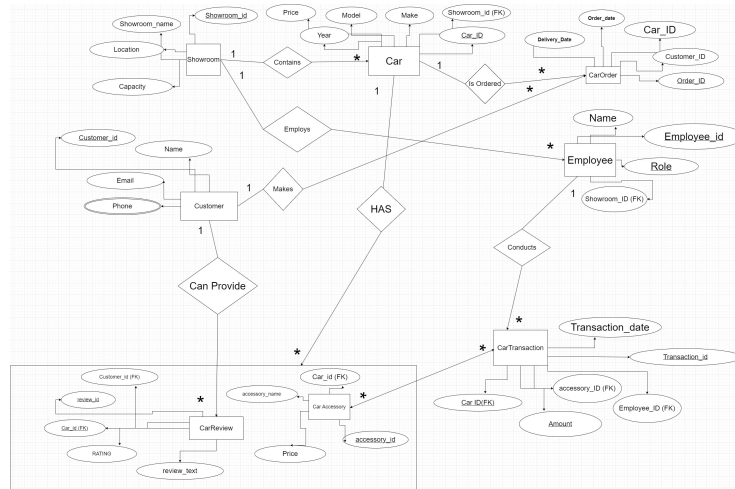


Figure 1: ER Diagram for A2Z Car-showroom

4 NORMALIZATION

Showroom

UNF:

showroom_id, location, capacity, showroom_name

1NF:

No multivalued attributes.

2NF:

showroom_id (PK), location, capacity, showroom_name

3NF:

No transitive dependencies

Car

UNF:

car_id, year, price, model, make, showroom_id (FK)

1NF:

No multivalued attributes.

2NF:

car_id (PK), year, price, model, make
showroom_id (FK)

3NF:

No transitive dependencies

Car Order

UNF:

order_id, delivery_date, order_date, car_id (FK), customer_id (FK)

1NF:

No multivalued attributes.

2NF:

order_id (PK), delivery_date, order_date

car_id (FK), customer_id (FK)

3NF:

No transitive dependencies

Employee

UNF:

employee_id, name, role, showroom_id (FK)

1NF:

No multivalued attributes.

2NF:

employee_id (PK), name, role

showroom_id (FK)

3NF:

No transitive dependencies

Car Transaction

UNF:

transaction_id, transaction_date, amount, car_id (FK), accessory_id (FK), employee_id (FK)

1NF:

No multivalued attributes.

2NF:

transaction_id (PK), transaction_date, amount

car_id (FK), accessory_id (FK), employee_id (FK)

3NF:

No transitive dependencies

Customer

UNF:

customer_id, name, email, phone (unique constraint)

1NF:

Phone is multivalued attribute.

2NF:

customer_id (PK), name, email

3NF:

No transitive dependencies

Car Review

UNF:

review_id, review_text, rating, car_id (FK), customer_id (FK)

1NF:

No multivalued attributes.

2NF:

review_id (PK), review_text, rating

car_id (FK), customer_id (FK)

3NF:

No transitive dependencies

Car Accessory

UNF:

accessory_id, price, accessory_name, car_id (FK)

1NF:

No multivalued attributes.

2NF:

accessory_id (PK), price, accessory_name

car_id (FK)

3NF:

No transitive dependencies

5 FINAL TABLE AFTER NORMALIZATION

1. **Showroom :**

Showroom ID (Primary Key): A unique identifier for each showroom. Showroom Name: A distinctive name that reflects the identity of each showroom. Location: The prime location where our showrooms are situated, ensuring accessibility for our customers. Car Holding Capacity: Ensuring that our showrooms always have an impressive collection of cars to offer.

2. **Car :**

Car ID: A unique identifier for every car in our showroom, facilitating easy tracking and management. Showroom ID (Foreign Key): Establishing a connection between each car and its respective showroom. Make: The brand or manufacturer of the car, representing the finest selection of automotive excellence. Model: The specific model of each car, providing our customers with a variety of options to suit their preferences. Year: The manufacturing year of each car, ensuring transparency in our offerings. Price: The competitive pricing of our cars, making luxury accessible to all.

3.Customer :

Customer ID: A personalized identification for each valued customer. Name: The name of our esteemed customers, ensuring a warm and personalized interaction. Email: Facilitating seamless communication and updates for our customers. Phone Number: A direct line to our customer service team, ensuring prompt assistance and support.

4.Employee :

Employee ID: A unique identifier for our dedicated team members. Name: The names of our skilled employees, ensuring a friendly and approachable environment. Role: Highlighting the expertise and specialization of each employee within our showroom. Showroom ID: Connecting each employee to their respective showroom, promoting teamwork and efficient operations.

5.Car Order :

Order ID: A distinctive identifier for each customer order, ensuring accurate and organized processing. Customer ID: Linking each order to the customer, ensuring personalized service throughout the buying process. Car ID: Connecting each order to the desired car, facilitating smooth handling and delivery. Order Date: Capturing the date when the order is placed, ensuring timely processing. Delivery Date: Promising a punctual and satisfying delivery experience for our customers.

6.Car Transaction :

Transaction ID: A unique identifier for each car transaction, ensuring secure and transparent dealings. Employee ID: Linking each transaction to the responsible employee, fostering accountability and trust. Car ID: Connecting each transaction to the car involved, ensuring accurate financial records. Transaction Date: Recording the date when the transaction takes place, enabling efficient financial tracking. Amount: The monetary value of each transaction, guaranteeing fair and competitive pricing.

7.Car Review :

Review ID: A distinctive identifier for each customer review, showcasing our commitment to feedback and improvement. Customer ID: Connecting each review to the respective customer, ensuring genuine and valuable insights. Car ID: Linking each review to the reviewed car, helping potential buyers make informed decisions. Rating: A numerical rating given by our customers, reflecting their satisfaction and experience. Review Text: The personalized feedback shared by our customers, guiding us in enhancing our services.

8. Car Accessory :

Accessory ID: A unique identifier for each car accessory, promoting a comprehensive and enjoyable driving experience. Car ID: Connecting each accessory to the car it complements, allowing customers to tailor their rides. Accessory Name: The names of the accessories, highlighting their quality and functionality.

Price: The cost of each accessory, ensuring affordability without compromising on quality.

6 TABLE CREATION

1. Showroom

```
CREATE TABLE Showroom (  
  showroom_id NUMBER PRIMARY KEY,  
  location VARCHAR2(100),  
  capacity NUMBER,  
  showroom_name VARCHAR2(100)  
);
```

Results Explain Describe Saved SQL History

Object Type	TABLE	Object	SHOWROOM							
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment	
SHOWROOM	SHOWROOM_ID	Number	-	-	-	1	-	-	-	
	LOCATION	Varchar2	100	-	-	-	✓	-	-	
	CAPACITY	Number	-	-	-	-	✓	-	-	
	SHOWROOM_NAME	Varchar2	100	-	-	-	✓	-	-	
1 - 4										

2. Car

```
CREATE TABLE Car (  
  car_id NUMBER PRIMARY KEY,  
  year NUMBER,  
  price NUMBER,  
  model VARCHAR2(100),  
  make VARCHAR2(100),  
  showroom_id NUMBER,  
  FOREIGN KEY (showroom_id) REFERENCES Showroom (showroom_id)  
);
```

Results Explain Describe Saved SQL History

Object Type TABLE Object CAR

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CAR	CAR_ID	Number	-	-	-	1	-	-	-
	YEAR	Number	-	-	-	-	✓	-	-
	PRICE	Number	-	-	-	-	✓	-	-
	MODEL	Varchar2	100	-	-	-	✓	-	-
	MAKE	Varchar2	100	-	-	-	✓	-	-
	SHOWROOM_ID	Number	-	-	-	-	✓	-	-

1 - 6

3. CarOrder

```
CREATE TABLE Car_Order (
order_id NUMBER PRIMARY KEY,
delivery_date DATE,
order_date DATE,
car_id NUMBER,
customer_id NUMBER,
FOREIGN KEY (car_id) REFERENCES Car (car_id),
FOREIGN KEY (customer_id) REFERENCES Customer (customer_id)
);
```

Results Explain Describe Saved SQL History

Object Type TABLE Object CAR_ORDER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CAR_ORDER	ORDER_ID	Number	-	-	-	1	-	-	-
	DELIVERY_DATE	Date	7	-	-	-	✓	-	-
	ORDER_DATE	Date	7	-	-	-	✓	-	-
	CAR_ID	Number	-	-	-	-	✓	-	-
	CUSTOMER_ID	Number	-	-	-	-	✓	-	-

1 - 5

4. Employee

```
CREATE TABLE Employee (
employee_id NUMBER PRIMARY KEY,
name VARCHAR2(100),
role VARCHAR2(100),
showroom_id NUMBER,
FOREIGN KEY (showroom_id) REFERENCES Showroom (showroom_id) );
```

Results Explain Describe Saved SQL History

Object Type TABLE Object EMPLOYEE

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPLOYEE	EMPLOYEE_ID	Number	-	-	-	1	-	-	-
	NAME	Varchar2	100	-	-	-	✓	-	-
	ROLE	Varchar2	100	-	-	-	✓	-	-
	SHOWROOM_ID	Number	-	-	-	-	✓	-	-

1 - 4

5. CarTransaction

```
CREATE TABLE CarTransaction (
transaction_id NUMBER PRIMARY KEY,
transaction_date DATE,
amount NUMBER,
car_id NUMBER,
accessory_id NUMBER,
employee_id NUMBER,
```



```

FOREIGN KEY (car_id) REFERENCES Car (car_id),
FOREIGN KEY (accessory_id) REFERENCES Car_Accessory (accessory_id),
FOREIGN KEY (employee_id) REFERENCES Employee (employee_id)
);

```

Results Explain Describe Saved SQL History

Object Type TABLE Object CARTRANSACTION

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CARTRANSACTION	TRANSACTION_ID	Number	-	-	-	1	-	-	-
	TRANSACTION_DATE	Date	7	-	-	-	✓	-	-
	AMOUNT	Number	-	-	-	-	✓	-	-
	CAR_ID	Number	-	-	-	-	✓	-	-
	ACCESSORY_ID	Number	-	-	-	-	✓	-	-
	EMPLOYEE_ID	Number	-	-	-	-	✓	-	-

1 - 6

6. Customer

```

CREATE TABLE Customer (
customer_id NUMBER PRIMARY KEY,
name VARCHAR2(100),
email VARCHAR2(100),
phone_number VARCHAR2(20)
);

```

Results	Explain	Describe	Saved SQL	History					
Object Type TABLE Object CUSTOMER									
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CUSTOMER	CUSTOMER_ID	Number	-	-	-	1	-	-	-
	NAME	Varchar2	100	-	-	-	✓	-	-
	EMAIL	Varchar2	100	-	-	-	✓	-	-
	PHONE_NUMBER	Varchar2	20	-	-	-	✓	-	-
1 - 4									

7. CarReview

```

CREATE TABLE CarReview (
review_id NUMBER PRIMARY KEY,
review_text VARCHAR2(1000),
rating NUMBER,
car_id NUMBER,
customer_id NUMBER,
FOREIGN KEY (car_id) REFERENCES Car (car_id),
FOREIGN KEY (customer_id) REFERENCES Customer (customer_id)
);

```

Results Explain Describe Saved SQL History

Object Type		TABLE	Object	CARREVIEW					
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CARREVIEW	REVIEW_ID	Number	-	-	-	1	-	-	-
	REVIEW_TEXT	Varchar2	1000	-	-	-	✓	-	-
	RATING	Number	-	-	-	-	✓	-	-
	CAR_ID	Number	-	-	-	-	✓	-	-
	CUSTOMER_ID	Number	-	-	-	-	✓	-	-

1 - 5

8. CarAccessory

```
CREATE TABLE CarAccessory (
accessory_id NUMBER PRIMARY KEY,
price NUMBER,
accessory_name VARCHAR2(100),
car_id NUMBER,
FOREIGN KEY (car_id) REFERENCES Car (car_id)
);
```

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **CARACCESSORY**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CARACCESSORY	ACCESSORY_ID	Number	-	-	-	1	-	-	-
	PRICE	Number	-	-	-	-	✓	-	-
	ACCESSORY_NAME	Varchar2	100	-	-	-	✓	-	-
	CAR_ID	Number	-	-	-	-	✓	-	-

1 - 4

7 DATA INSERTION

1.Showroom

```
INSERT INTO Showroom (showroom_id, location, capacity, showroom_name)
VALUES (1, 'Dhaka', 100, 'A2Z Showroom Dhaka');
```

```
INSERT INTO Showroom (showroom_id, location, capacity, showroom_name)
VALUES (2, 'Bogura', 80, 'A2Z Showroom Bogura');
```

```
INSERT INTO Showroom (showroom_id, location, capacity, showroom_name)
VALUES (3, 'Chittagong', 120, 'A2Z Showroom Chittagong');
```

```
INSERT INTO Showroom (showroom_id, location, capacity, showroom_name)
VALUES (4, 'Rajshahi', 90, 'A2Z Showroom Rajshahi');
```

```
INSERT INTO Showroom (showroom_id, location, capacity, showroom_name)
VALUES (5, 'Khulna', 150, 'A2Z Showroom Khulna');
```

Results	Explain	Describe	Saved SQL	History
SHOWROOM_ID	LOCATION	CAPACITY	SHOWROOM_NAME	
1	Dhaka	100	A2Z Showroom Dhaka	
2	Bogura	80	A2Z Showroom Bogura	
4	Rajshahi	90	A2Z Showroom Rajshahi	
5	Khulna	150	A2Z Showroom Khulna	
3	Chittagong	120	A2Z Showroom Chittagong	

2.CAR

```
INSERT INTO Car (car_id, year, price, model, make, showroom_id)
VALUES (1, 2023, 3500000, 'Civic', 'Honda', 1);
```

```
INSERT INTO Car (car_id, year, price, model, make, showroom_id)
VALUES (2, 2022, 4200000, 'Accord', 'Honda', 1);
```

```
INSERT INTO Car (car_id, year, price, model, make, showroom_id)
VALUES (3, 2023, 5500000, 'X5', 'BMW', 2);
```

```
INSERT INTO Car (car_id, year, price, model, make, showroom_id)
VALUES (4, 2022, 6000000, 'M5', 'BMW', 2);
```

```
INSERT INTO Car (car_id, year, price, model, make, showroom_id)
VALUES (5, 2023, 3000000, 'Corolla', 'Toyota', 3);
```

```
INSERT INTO Car (car_id, year, price, model, make, showroom_id)
VALUES (6, 2022, 3800000, 'Camry', 'Toyota', 3);
```

```
INSERT INTO Car (car_id, year, price, model, make, showroom_id)
VALUES (7, 2023, 4000000, 'C-Class', 'Mercedes-Benz', 4);
```

```
INSERT INTO Car (car_id, year, price, model, make, showroom_id)
VALUES (8, 2022, 5000000, 'E-Class', 'Mercedes-Benz', 4);
```

Results

Explain

Describe

Saved SQL

History

CAR_ID	YEAR	PRICE	MODEL	MAKE	SHOWROOM_ID
1	2023	3500000	Civic	Honda	1
2	2022	4200000	Accord	Honda	1
3	2023	5500000	X5	BMW	2
4	2022	6000000	M5	BMW	2
5	2023	3000000	Corolla	Toyota	3
6	2022	3800000	Camry	Toyota	3
7	2023	4000000	C-Class	Mercedes-Benz	4
8	2022	5000000	E-Class	Mercedes-Benz	4

3.Customer

```
INSERT INTO Customer (customer_id, name, email, phone_number)
VALUES (1, 'S. M MEHEDI HASAN', 'hasansm@gmail.com', '0154615614561');
```

```
INSERT INTO Customer (customer_id, name, email, phone_number)
VALUES (2, 'SHREYASHEE SING PUJA', 's32@gmail.com', '011549454354');
```

```
INSERT INTO Customer (customer_id, name, email, phone_number)
VALUES (3, 'SHUJATO BARUA', 'sbarua@gmail.com', '01245865555');
```

```
INSERT INTO Customer (customer_id, name, email, phone_number)
VALUES (4, 'TAHIRA TAPOSHI', 'ttaposhi@example.com', '0124384354534');
```

```
INSERT INTO Customer (customer_id, name, email, phone_number)
VALUES (5, 'ANIKA TAHAMINA CHOWDHURY', 'taha@gmail.com', '011111426865');
```

```
INSERT INTO Customer (customer_id, name, email, phone_number)
VALUES (6, 'NANDA BARUA', 'nandeo@gmail.com', '0154344345');
```

```
INSERT INTO Customer (customer_id, name, email, phone_number)
VALUES (7, 'KASHFIYA KALAM', 'kashfiya12@gmail.com', '01345453534');
```

```
INSERT INTO Customer (customer_id, name, email, phone_number)
VALUES (8, 'JANNATUL FARDUSH MIM', 'jfm@gmail.com', '01453434535');
```

Results Explain Describe Saved SQL History

CUSTOMER_ID	NAME	EMAIL	PHONE_NUMBER
1	S. M MEHEDI HASAN	hasansm@gmail.com	0154615614561
2	SHREYASHEE SING PUJA	s32@gmail.com	011549454354
3	SHUJATO BARUA	sbarua@gmail.com	01245865555
4	TAHIRA TAPOSHI	ttaposhi@example.com	0124384354534
5	ANIKA TAHAMINA CHOWDHURY	taha@gmail.com	011111426865
6	NANDA BARUA	nandeo@gmail.com	0154344345
7	KASHFIYA KALAM	kashfiya12@gmail.com	01345453534
8	JANNATUL FARDUSH MIM	jfm@gmail.com	01453434535

4. Car_Order

```
INSERT INTO Car_Order (order_id, delivery_date, order_date, car_id, customer_id)
VALUES (1, DATE '2023-07-30', DATE '2023-07-25', 1, 1);
```

```
INSERT INTO Car_Order (order_id, delivery_date, order_date, car_id, customer_id)
VALUES (2, DATE '2023-08-05', DATE '2023-08-01', 2, 2);
```

```
INSERT INTO Car_Order (order_id, delivery_date, order_date, car_id, customer_id)
VALUES (3, DATE '2023-08-10', DATE '2023-08-03', 3, 3);
```

```
INSERT INTO Car_Order (order_id, delivery_date, order_date, car_id, customer_id)
VALUES (4, DATE '2023-08-15', DATE '2023-08-10', 4, 4);
```

```
INSERT INTO Car_Order (order_id, delivery_date, order_date, car_id, customer_id)
VALUES (5, DATE '2023-08-20', DATE '2023-08-15', 5, 5);
```

```
INSERT INTO Car_Order (order_id, delivery_date, order_date, car_id, customer_id)
VALUES (6, DATE '2023-08-25', DATE '2023-08-20', 6, 6);
```

```
INSERT INTO Car_Order (order_id, delivery_date, order_date, car_id, customer_id)
VALUES (7, DATE '2023-08-30', DATE '2023-08-25', 7, 7);
```

```
INSERT INTO Car_Order (order_id, delivery_date, order_date, car_id, customer_id)
VALUES (8, DATE '2023-09-05', DATE '2023-09-01', 8, 8);
```

Results	Explain	Describe	Saved SQL	History
ORDER_ID	DELIVERY_DATE	ORDER_DATE	CAR_ID	CUSTOMER_ID
1	30-JUL-23	25-JUL-23	1	1
2	05-AUG-23	01-AUG-23	2	2
3	10-AUG-23	03-AUG-23	3	3
4	15-AUG-23	10-AUG-23	4	4
5	20-AUG-23	15-AUG-23	5	5
6	25-AUG-23	20-AUG-23	6	6
7	30-AUG-23	25-AUG-23	7	7
8	05-SEP-23	01-SEP-23	8	8

8 rows returned in 0.02 seconds

[CSV Export](#)

5. Employee

```
INSERT INTO Employee (employee_id, name, role, showroom_id)
```

```
VALUES (1, 'MD. RAHMAN', 'Sales Associate', 1);
```

```
INSERT INTO Employee (employee_id, name, role, showroom_id)
VALUES (2, 'MST. FATEMA', 'Manager', 2);
```

```
INSERT INTO Employee (employee_id, name, role, showroom_id)
VALUES (3, 'MD. MAKBUL', 'Technician', 1);
```

```
INSERT INTO Employee (employee_id, name, role, showroom_id)
VALUES (4, 'MD. SHAFIUL', 'Sales Associate', 3);
```

```
INSERT INTO Employee (employee_id, name, role, showroom_id)
VALUES (5, 'MD. HASAN', 'Manager', 2);
```

```
INSERT INTO Employee (employee_id, name, role, showroom_id)
VALUES (6, 'MST. KONOK', 'Technician', 1);
```

```
INSERT INTO Employee (employee_id, name, role, showroom_id)
VALUES (7, 'MST NAIME', 'Sales Associate', 3);
```

```
INSERT INTO Employee (employee_id, name, role, showroom_id)
VALUES (8, 'MD NAIMUL', 'Manager', 4);
```

Results	Explain	Describe	Saved SQL	History
EMPLOYEE_ID	NAME	ROLE	SHOWROOM_ID	
1	MD. RAHMAN	Sales Associate	1	
2	MST. FATEMA	Manager	2	
3	MD. MAKBUL	Technician	1	
4	MD. SHAFIUL	Sales Associate	3	
5	MD. HASAN	Manager	2	
6	MST. KONOK	Technician	1	
7	MST NAIME	Sales Associate	3	
8	MD NAIMUL	Manager	4	

6.CarReview

```
INSERT INTO CarReview (review_id, review_text, rating, car_id, customer_id)
VALUES (1, 'Runs Good', 5, 1, 1);
```

```
INSERT INTO CarReview (review_id, review_text, rating, car_id, customer_id)
VALUES (2, 'I love the car.', 4, 2, 2);
```

```
INSERT INTO CarReview (review_id, review_text, rating, car_id, customer_id)
VALUES (3, 'The cars performance is exceptional.', 5, 3, 3);
```

```
INSERT INTO CarReview (review_id, review_text, rating, car_id, customer_id)
VALUES (4, 'Decent car for the price.', 3, 4, 4);
```

```
INSERT INTO CarReview (review_id, review_text, rating, car_id, customer_id)
VALUES (5, 'Comfortable .', 4, 5, 5);
```

```
INSERT INTO CarReview (review_id, review_text, rating, car_id, customer_id)
VALUES (6, 'Not happy with the gas mileage.', 2, 6, 6);
```

```
INSERT INTO CarReview (review_id, review_text, rating, car_id, customer_id)
VALUES (7, 'Good value for money.', 4, 7, 7);
```

```
INSERT INTO CarReview (review_id, review_text, rating, car_id, customer_id)
VALUES (8, 'Excellent safety features.', 5, 8, 8);
```

REVIEW_ID	REVIEW_TEXT	RATING	CAR_ID	CUSTOMER_ID
1	Runs Good	5	1	1
2	I love the car.	4	2	2
4	Decent car for the price.	3	4	4
5	Comfortable .	4	5	5
6	Not happy with the gas mileage.	2	6	6
7	Good value for money.	4	7	7
8	Excellent safety features.	5	8	8
3	The cars performance is exceptional.	5	3	3

7.CarAccessory

```
INSERT INTO CarAccessory (accessory_id, price, accessory_name, car_id)
VALUES (1, 500, 'Floor Mats', 1);
```

```
INSERT INTO CarAccessory (accessory_id, price, accessory_name, car_id)
VALUES (2, 1000, 'Roof Rack', 2);
```

```
INSERT INTO CarAccessory (accessory_id, price, accessory_name, car_id)
VALUES (3, 2000, 'Car Cover', 3);
```

```
INSERT INTO CarAccessory (accessory_id, price, accessory_name, car_id)
VALUES (4, 300, 'USB Charger', 1);
```

```
INSERT INTO CarAccessory (accessory_id, price, accessory_name, car_id)
VALUES (5, 1500, 'Spoiler', 4);
```

```
INSERT INTO CarAccessory (accessory_id, price, accessory_name, car_id)
VALUES (6, 800, 'Phone Holder', 2);
```

```
INSERT INTO CarAccessory (accessory_id, price, accessory_name, car_id)
VALUES (7, 600, 'Seat Covers', 3);
```

```
INSERT INTO CarAccessory (accessory_id, price, accessory_name, car_id)
VALUES (8, 1800, 'Alloy Wheels', 5);
```

Results	Explain	Describe	Saved SQL	History
ACCESSORY_ID	PRICE	ACCESSORY_NAME	CAR_ID	
1	500	Floor Mats	1	
2	1000	Roof Rack	2	
3	2000	Car Cover	3	
4	300	USB Charger	1	
5	1500	Spoiler	4	
6	800	Phone Holder	2	
7	600	Seat Covers	3	
8	1800	Alloy Wheels	5	

8 rows returned in 0.00 seconds [CSV Export](#)

8.CarTransaction

```
INSERT INTO CarTransaction (transaction_id, transaction_date, amount, car_id,
accessory_id, employee_id)
VALUES (1, DATE '2023-07-30', 500, 1, 1, 1);
```

```
INSERT INTO CarTransaction (transaction_id, transaction_date, amount,
car_id, accessory_id, employee_id)
VALUES (2, DATE '2023-08-05', 4000, 2, 2, 2);
```

```
INSERT INTO CarTransaction (transaction_id, transaction_date, amount,
car_id, accessory_id, employee_id)
VALUES (3, DATE '2023-08-10', 2000, 3, 5, 3);
```

```
INSERT INTO CarTransaction (transaction_id, transaction_date, amount,
car_id, accessory_id, employee_id)
VALUES (4, DATE '2023-08-15', 300, 4, 4, 4);
```

```
INSERT INTO CarTransaction (transaction_id, transaction_date, amount,
car_id, accessory_id, employee_id)
VALUES (5, DATE '2023-08-20', 8000, 5, 3, 5);
```

```
INSERT INTO CarTransaction (transaction_id, transaction_date, amount,
car_id, accessory_id, employee_id)
VALUES (6, DATE '2023-08-25', 1800, 6, 6, 6);
```

```
INSERT INTO CarTransaction (transaction_id, transaction_date, amount,
car_id, accessory_id, employee_id)
VALUES (7, DATE '2023-08-30', 2800, 7, 8, 7);
```



```
INSERT INTO CarTransaction (transaction_id, transaction_date, amount,
car_id, accessory_id, employee_id)
VALUES (8, DATE '2023-09-05', 2000, 8, 8, 8);
```

Results Explain Describe Saved SQL History

TRANSACTION_ID	TRANSACTION_DATE	AMOUNT	CAR_ID	ACCESSORY_ID	EMPLOYEE_ID
1	30-JUL-23	500	1	1	1
2	05-AUG-23	4000	2	2	2
3	10-AUG-23	2000	3	5	3
4	15-AUG-23	300	4	4	4
5	20-AUG-23	8000	5	3	5
6	25-AUG-23	1800	6	6	6
7	30-AUG-23	2800	7	8	7
8	05-SEP-23	2000	8	8	8

8 rows returned in 0.00 seconds

CSV Export

8 QUERY, VIEW, SEQUENCE

SIMPLE QUERIES

1.Query: Retrieve the names and capacities of all showrooms.

```
SELECT showroom.name, capacity FROM Showroom;
```

Results Explain Describe Saved SQL History

SHOWROOM_NAME	CAPACITY
A2Z Showroom Dhaka	100
A2Z Showroom Bogura	80
A2Z Showroom Rajshahi	90
A2Z Showroom Khulna	150
A2Z Showroom Chittagong	120

5 rows returned in 0.00 seconds CSV Export

2.Query: Retrieve the car_id, year, and model of all cars.

```
SELECT car_id, year, model FROM Car;
```

Results	Explain	Describe	Saved SQL	History
---------	---------	----------	-----------	---------

CAR_ID	YEAR	MODEL
1	2023	Civic
2	2022	Accord
3	2023	X5
4	2022	M5
5	2023	Corolla
6	2022	Camry
7	2023	C-Class
8	2022	E-Class

8 rows returned in 0.02 seconds [CSV Export](#)

3.Query: Retrieve the customer_id, name, email, and phone.number of all customers.

SELECT customer_id, name, email, phone_number FROM Customer;

Results	Explain	Describe	Saved SQL	History
---------	---------	----------	-----------	---------

CUSTOMER_ID	NAME	EMAIL	PHONE_NUMBER
1	S. M MEHEDI HASAN	hasansm@gmail.com	0154615614561
2	SHREYASHEE SING PUJA	s32@gmail.com	011549454354
3	SHUJATO BARUA	sbarua@gmail.com	01245865555
4	TAHIRA TAPOSHI	ttaposhi@example.com	0124384354534
5	ANIKA TAHAMINA CHOWDHURY	taha@gmail.com	011111426865
6	NANDA BARUA	nandeo@gmail.com	0154344345
7	KASHFIYA KALAM	kashfiya12@gmail.com	01345453534
8	JANNATUL FARDUSH MIM	jfm@gmail.com	01453434535

8 rows returned in 0.02 seconds [CSV Export](#)

SINGLE ROW SUB-QUERIES

4.Query: Retrieve the showroom location where the car with car_id = 5 is available.

```
SELECT location
FROM Showroom
WHERE showroom_id = (
SELECT showroom_id
```

```

FROM Car
WHERE car_id = 5
);

```

Results	Explain	Describe	Saved SQL	History
LOCATION				
Chittagong				
1 rows returned in 0.00 seconds CSV Export				

5.Query: Retrieve the car_id of the most expensive car.

```

SELECT car_id
FROM Car
WHERE price = (
SELECT MAX(price)
FROM Car
);

```

Results	Explain	Describe	Saved SQL	History
CAR_ID				
4				
1 rows returned in 0.01 seconds CSV Export				

6.Query: Retrieve the number of accessories available for the car with car_id = 2.

```

SELECT (
SELECT COUNT(*)
FROM Car_Accessory
WHERE car_id = 2
) AS accessory_count
FROM dual;

```

Results	Explain	Describe	Saved SQL	History		
<table><tr><th>ACCESSORY_COUNT</th></tr><tr><td>2</td></tr></table>					ACCESSORY_COUNT	2
ACCESSORY_COUNT						
2						
1 rows returned in 0.01 seconds			CSV Export			

MULTI ROW SUB-QUERIES

6.Query: Retrieve the names of customers who have made transactions with amounts greater than the average transaction amount. SELECT name
FROM Customer
WHERE customer_id IN (
SELECT customer_id
FROM CarTransaction
WHERE amount > (
SELECT AVG(amount)
FROM CarTransaction
)
);

Results Explain Describe Saved SQL History

NAME
S. M MEHEDI HASAN
SHREYASHEE SING PUJA
SHUJATO BARUA
TAHIRA TAPOSHI
ANIKA TAHAMINA CHOWDHURY
NANDA BARUA
KASHFIYA KALAM
JANNATUL FARDUSH MIM

8 rows returned in 0.03 seconds

[CSV Export](#)

7.Query: Retrieve the car models with the same make as the car with car_id = 1.
SELECT model
FROM Car

```

WHERE make = (
SELECT make
FROM Car
WHERE car_id = 1
);

```

Results Explain Describe Saved SQL History

MODEL

Civic

Accord

2 rows returned in 0.00 seconds

[CSV Export](#)

8.Query: Retrieve the names of customers whose email addresses contain the word "gmail".

```

SELECT name
FROM Customer
WHERE customer_id IN (
SELECT customer_id
FROM CarTransaction

WHERE customer_id IN (
SELECT customer_id
FROM Customer
WHERE email LIKE '
);

```

Results Explain Describe Saved SQL History

NAME
S. M MEHEDI HASAN
SHREYASHEE SING PUJA
SHUJATO BARUA
ANIKA TAHAMINA CHOWDHURY
NANDA BARUA
KASHFIYA KALAM
JANNATUL FARDUSH MIM

7 rows returned in 0.03 seconds

[CSV Export](#)