



AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)

FACULTY OF SCIENCE & TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE

Introduction to Database

Summer 2020-2021

Section: A

Topic

Vehicle Renting System

Supervised By

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Submitted By

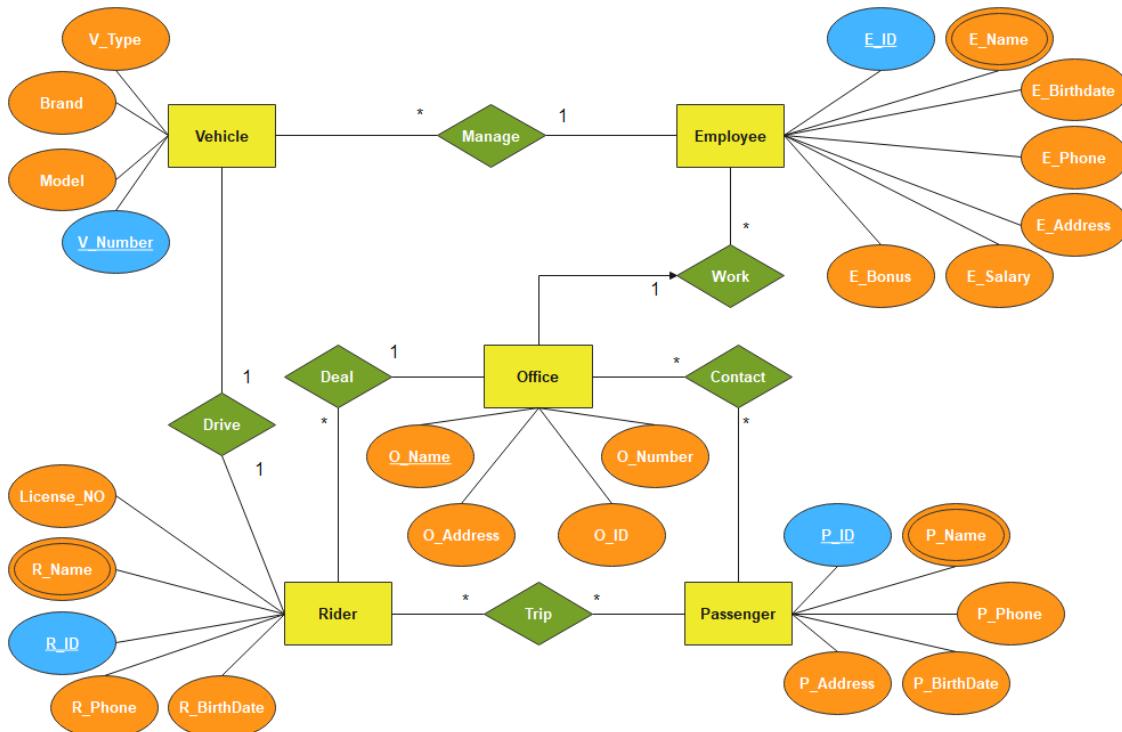
Name	ID	Contribution
MONKIR CHOWDHURY	20-44085-2	Normalization (50%), Description
FAHIM MUNTASIR RUBY	20-43557-1	Table creation, set pk, fk
SHAREAR AHAMMED NIHAL	20-42627-1	Diagram drawing, valid query
NUR MOHAMMAD MEZBAH UDDIN NAHID	19-39453-1	Normalization (50%), sequence
MEHEDI IBNE SHARIF	20-41927-1	Insertion, constraint

Date of Submission: August 17, 2021

Description

- Every passenger has their id, name, phone number, birthdate, and address. The passengers are identified by their id. Their phone number must be unique.
- The passengers called for trip to riders. Every rider has their id, name, driving license number, phone number and birthdate. The riders are identified by their id. Every rider's driving license number must be unique.
- Every rider can drive a vehicle. Every vehicle has a serial number, model, brand and their type like motorcycle, car. The vehicles are identified by their serial number.
- Every vehicle is managed by an employee. Every employee has an id, name, phone number, birthdate, address, salary, and bonus. An employee can manage more than one vehicle. The employees are identified by their id. Their phone number should be unique.
- Every employee can work for an office, but an office can have more than one employee. Every office has id, name, phone number, birthdate, and address. They are identified by their id. Their phone number and name should be unique. The offices deal with riders and contact with passengers.

ER Diagram



Normalization

Trip (P_ID, P_Name, P_Phone, P_Birthdate, P_Address, R_ID, License_No, R_Name, R_phone, R_BirthDate,)

1NF: P_Name, R_Name, are multivalued attributes.

2NF:

P_ID, P_Name, P_Phone, P_Birthdate, P_Address
R_ID, License_No, R_Name, R_phone, R_BirthDate

3NF:

(No transitive dependency)
P_ID, P_Name, P_Phone, P_Birthdate, P_Address
R_ID, License_No, R_Name, R_phone, R_BirthDate

Table for trip:

1. P_ID, P_Name, (composite key)
2. P_ID, P_Phone, P_Birthdate, P_Address
3. R_ID, R_Name (composite key)
4. R_ID, License_No, R_phone, R_BirthDate
5. T_ID, P_ID, R_ID

contact (P_ID, P_Name, P_Phone, P_Birthdate, P_Address, O_Name, O_ID, O_Address, O_Number)

1NF:

P_Name is a multivalued attribute.

2NF:

P_ID, P_Name, P_Phone, P_Birthdate, P_Address
O_ID, O_Name, O_Address, O_Number

3NF:

(No transitive dependency)
P_ID, P_Name, P_Phone, P_Birthdate, P_Address
O_ID, O_Name, O_Address, O_Number

Table for contact:

6. P_ID, P_Name, (composite key)
7. P_ID, P_Phone, P_Birthdate, P_Address
8. O_ID, O_Name, O_Address, O_Number
9. C_ID, P_ID, O_ID

Deal (R_ID, License_No, R_Name, R_phone, R_BirthDate, O_Name, O_ID, O_Address, O_Number)

1NF: R_Name is a multivalued attribute.

2NF:

R_ID, License_No, R_Name, R_phone, R_BirthDate
O_ID, O_Name, O_Address, O_Number

3NF:

(No transitive dependency)
R_ID, License_No, R_Name, R_phone, R_BirthDate
O_ID, O_Name, O_Address, O_Number

Table for Deal:

10. R_ID, R_Name (composite key)
11. R_ID, License_No, R_phone, R_BirthDate, O_ID
12. O_ID, O_Name, O_Address, O_Number

Drive (R_ID, License_No, R_Name, R_phone, R_BirthDate, V_Number, V_Type, model, brand)

1NF:

R_Name is a multivalued attribute.

2NF:

R_ID, License_No, R_Name, R_phone, R_BirthDate
V_Number, V_Type, model, brand

3NF:

(Model ,brand and v_type have transitive dependency)
R_ID, License_No, R_Name, R_phone, R_BirthDate
V_Number
M_ID, model, brand, V_Type

Table for Drive:

13. R_ID, R_Name (composite key)
14. R_ID, License_No, R_phone, R_BirthDate, V_Number
15. V_Number, M_ID
16. M_ID, model, brand, V_Type

Manage

(V_Number, V_Type, model, brand, E_ID, E_Name, E_Birthdate, E_Phone, E_Address, E_Salary, E_Bonus)

1NF:

E_Name is a multivalued attribute.

2NF:

V_Number, V_Type, model, brand
E_ID, E_Name, E_Birthdate, E_Phone, E_Address, E_Salary, E_Bonus

3NF:

(Model ,brand and v_type have transitive dependency)

V_Number
M_ID, model, brand , V_Type
E_ID, E_Name, E_Birthdate, E_Phone, E_Address, E_Salary, E_Bonus

Table for Manage:

17. V_Number, M_ID, E_ID
18. M_ID, model, brand, V_Type
19. E_ID, E_Name (composite key)
20. E_ID, E_Birthdate, E_Phone, E_Address, E_Salary, E_Bonus

Work (E_ID, E_Name, E_BirthDate, E_Phone, E_Address, E_Salary, E_Bonus, O_Name, O_ID, O_Address, O_Number)

1NF:

E_Name is a multivalued attribute.

2NF:

E_ID, E_Name, E_BirthDate, E_Phone, E_Address, E_Salary, E_Bonus
O_ID, O_Name, O_Address, O_Number

3NF:

(No transitive dependency)
E_ID, E_Name, E_BirthDate, E_Phone, E_Address, E_Salary, E_Bonus
O_ID, O_Name, O_Address, O_Number

Table for work:

21. E_ID, E_Name (composite key)
22. E_ID, E_BirthDate, E_Phone, E_Address, E_Salary, E_Bonus, O_ID
23. O_ID, O_Name, O_Address, O_Number

Tables for normalization:

1. **P_ID**, P_Name, (composite key)
2. **P_ID**, P_Phone, P_Birthdate, P_Address
3. **R_ID**, R_Name (composite key)
4. **R_ID**, License_No, R_phone, R_BirthDate
5. **T_ID**, P_ID, R_ID
6. **P_ID**, P_Name, (composite key)
7. **P_ID**, P_Phone, P_Birthdate, P_Address
8. **O_ID**, O_Name, O_Address, O_Number
9. **C_ID**, P_ID, O_ID
10. **R_ID**, R_Name (composite key)
11. **R_ID**, License_No, R_phone, R_BirthDate, **O_ID**
12. **O_ID**, O_Name, O_Address, O_Number
13. **R_ID**, R_Name (composite key)
14. **R_ID**, License_No, R_phone, R_BirthDate, **V_Number**
15. **V_Number**, **M_ID**
16. **M_ID**, model, brand, V_Type
17. **V_Number**, **M_ID**, **E_ID**
18. **M_ID**, model, brand, V_Type
19. **E_ID**, E_Name (composite key)
20. **E_ID**, E_Birthdate, E_Phone, E_Address, E_Salary, E_Bonus
21. **E_ID**, E_Name (composite key)
22. **E_ID**, E_BirthDate, E_Phone, E_Address, E_Salary, E_Bonus, **O_ID**
23. **O_ID**, O_Name, O_Address, O_Number

Tables After normalization:

1. **P_ID**, P_Name, (composite key) -----(**pname**)
2. **P_ID**, P_Phone, P_Birthdate, P_Address -----(**Passenger**)
3. **R_ID**, R_Name (composite key) -----(**rname**)
4. **R_ID**, License_No, R_phone, R_BirthDate, **O_ID**, **V_Number** -----(**Rider**)
5. **T_ID**, P_ID, R_ID -----(**trip**)
6. **O_ID**, O_Name, O_Address, O_Number -----(**Office**)
7. **C_ID**, P_ID, O_ID -----(**contact**)
8. **V_Number**, **M_ID**, **E_ID** -----(**Vehicle**)
9. **M_ID**, model, brand, V_Type -----(**VMB**)
10. **E_ID**, E_Name (composite key) -----(**ename**)
11. **E_ID**, E_BirthDate, E_Phone, E_Address, E_Salary, E_Bonus, **O_ID** -----(**Employee**)

Table Creation

User: SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
desc trip
```

Results Explain Describe Saved SQL History

Object Type TABLE Object TRIP

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
TRIP	T_ID	Number	-	10	0	1	-	-	-
	P_ID	Number	-	10	0	-	✓	-	-
	R_ID	Number	-	10	0	-	✓	-	-

Call with IDB GROUP PROJE... 1850 -

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Autocommit Display 10

```
desc employee
```

Results Explain Describe Saved SQL History

Object Type TABLE Object EMPLOYEE

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPLOYEE	E_ID	Number	-	10	0	1	-	-	-
	E_BIRTHDATE	Date	7	-	-	-	✓	-	-
	E_PHONE	Number	-	11	0	-	✓	-	-
	E_ADDRESS	Varchar2	25	-	-	-	✓	-	-
	E_SALARY	Number	-	7	0	-	-	-	-
	E_BONUS	Number	-	7	0	-	✓	-	-
	O_ID	Number	-	10	0	-	✓	-	-

Call with IDB GROUP PROJE... 1840 -

Type here to search

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

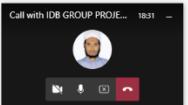
```
desc ename
```

Results Explain Describe Saved SQL History

Object Type TABLE Object ENAME

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ENAME	E_ID	Number	-	10	0	1	-	-	-
	E_NAME	Varchar2	25	-	-	2	-	-	-

1 - 2

Call with IDB GROUP PROJE... 18:31 - 

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Autocommit Display 10

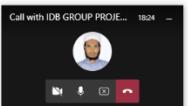
```
desc vmb
```

Results Explain Describe Saved SQL History

Object Type TABLE Object VMB

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
VMB	M_ID	Number	-	10	0	1	-	-	-
	MODEL	Varchar2	20	-	-	-	✓	-	-
	BRAND	Varchar2	15	-	-	-	✓	-	-
	V_TYPE	Varchar2	10	-	-	-	✓	-	-

1 - 4

Call with IDB GROUP PROJE... 18:24 - 

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Autocommit

```
desc vehicle
```

Results Explain Describe Saved SQL History

Object Type TABLE Object VEHICLE

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
VEHICLE	V_NUMBER	Number	-	10	0	1	-	-	-
	M_ID	Number	-	10	0	-	✓	-	-
	E_ID	Number	-	10	0	-	✓	-	-

Call with IDB GROUP PROJE... 18:18 - 

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Home > SQL > SQL Commands

Autocommit

```
desc contact
```

Results Explain Describe Saved SQL History

Object Type TABLE Object CONTACT

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CONTACT	C_ID	Number	-	10	0	1	-	-	-
	P_ID	Number	-	10	0	-	✓	-	-
	O_ID	Number	-	10	0	-	✓	-	-

Call with IDB GROUP PROJE... 18:10 - 

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Autocommit Display 10

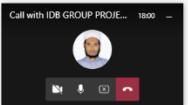
```
desc office
```

Results Explain Describe Saved SQL History

Object Type TABLE Object OFFICE

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
OFFICE	O_ID	Number	-	10	0	1	-	-	-
	O_NAME	Varchar2	25	-	-	-	✓	-	-
	O_ADDRESS	Varchar2	25	-	-	-	✓	-	-
	O_NUMBER	Number	-	11	0	-	✓	-	-

1 - 4

Call with IDB GROUP PROJ... 1800 - 

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Autocommit Display 10

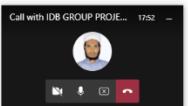
```
desc rider
```

Results Explain Describe Saved SQL History

Object Type TABLE Object RIDER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
RIDER	R_ID	Number	-	10	0	1	-	-	-
	LICENSE_NO	Varchar2	15	-	-	-	✓	-	-
	R_PHONE	Number	-	11	0	-	✓	-	-
	R_BIRTHDATE	Date	7	-	-	-	✓	-	-
	O_ID	Number	-	10	0	-	✓	-	-
	V_NUMBER	Number	-	10	0	-	✓	-	-

1 - 6

Call with IDB GROUP PROJ... 1752 - 

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Autocommit

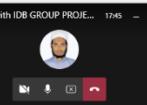
```
desc rname
```

Results Explain Describe Saved SQL History

Object Type TABLE Object RNAME

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
RNAME	R_ID	Number	-	10	0	1	-	-	-
RNAME	R_NAME	Varchar2	25	-	-	2	-	-	-

1 - 2

Call with IDB GROUP PROJE... 1745 - 

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Autocommit

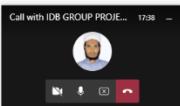
```
desc passenger
```

Results Explain Describe Saved SQL History

Object Type TABLE Object PASSENGER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
PASSENGER	P_ID	Number	-	10	0	1	-	-	-
PASSENGER	P_PHONE	Number	-	11	0	-	✓	-	-
PASSENGER	P_BIRTHDATE	Date	7	-	-	-	✓	-	-
PASSENGER	P_ADDRESS	Varchar2	25	-	-	-	✓	-	-

1 - 4

Call with IDB GROUP PROJE... 1738 - 

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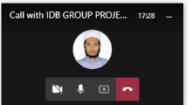
Autocommit

```
desc pname
```

Results Explain Describe Saved SQL History

Object Type TABLE Object PNAME

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
PNAME	P_ID	Number	-	10	0	1	-	-	-
	P_NAME	Varchar2	25	-	-	2	-	-	-
1 - 2									

Call with IDB GROUP PROJE... 1728 – 

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Setting Foreign Key

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
Select * from all_constraints
where table_name='EMPLOYEE'
```

Call with IDB GROUP PROJE... 1549 – 

Results Explain Describe Saved SQL History

OWNER	CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME	SEARCH_CONDITION	R_OWNER	R_CONSTRAINT_NAME	DELETE_RULE	STATUS	DEFERRABLE	DEFERRED	VALIDATE
SCOTT	EPK	P	EMPLOYEE	-	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	OFK	R	EMPLOYEE	-	SCOTT	OPK	NO ACTION	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	EP_U	U	EMPLOYEE	-	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	SYS_C005222	C	EMPLOYEE	"E_SALARY" IS NOT NULL	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE

4 rows returned in 0.02 seconds [CSV Export](#) Application Express 2.1.0.00.39 Copyright © 1999, 2006, Oracle. All rights reserved.

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
Select * from all_constraints
where table_name='VEHICLE'
```

Call with IDB GROUP PROJ... 14:50 -

Results Explain Describe Saved SQL History

OWNER	CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME	SEARCH_CONDITION	R_OWNER	R_CONSTRAINT_NAME	DELETE_RULE	STATUS	DEFERRABLE	DEFERRED	VALIDATE
SCOTT	VPK	P	VEHICLE	-	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	EFP	R	VEHICLE	-	SCOTT	EPK	NO ACTION	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	MFK	R	VEHICLE	-	SCOTT	MPK	NO ACTION	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE

3 rows returned in 0.03 seconds [CSV Export](#)

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User SCOTT

Home > SQL > SQL Commands

Autocommit

```
Select * from all_constraints
where table_name='CONTACT'
```

Call with IDB GROUP PROJ... 14:17 -

Results Explain Describe Saved SQL History

OWNER	CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME	SEARCH_CONDITION	R_OWNER	R_CONSTRAINT_NAME	DELETE_RULE	STATUS	DEFERRABLE	DEFERRED	VALIDATE
SCOTT	CP	P	CONTACT	-	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	COFK	R	CONTACT	-	SCOTT	OPK	NO ACTION	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	CPFK	R	CONTACT	-	SCOTT	PPK	NO ACTION	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE

3 rows returned in 0.01 seconds [CSV Export](#)

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Facebook SQL Commands

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
Select * from all_constraints
where table_name='TRIP'
```

Call with IDB GROUP PROJ... 13:36 –

Results Explain Describe Saved SQL History

OWNER	CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME	SEARCH_CONDITION	R_OWNER	R_CONSTRAINT_NAME	DELETE_RULE	STATUS	DEFERRABLE	DEFERRED	VALIDATE
SCOTT	TPK	P	TRIP	-	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	PFK	R	TRIP	-	SCOTT	PPK	NO ACTION	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	TRFK	R	TRIP	-	SCOTT	RPK	NO ACTION	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE

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

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Facebook SQL Commands

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
Select * from all_constraints
where table_name='RIDER'
```

Call with IDB GROUP PROJ... 13:02 –

Results Explain Describe Saved SQL History

OWNER	CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME	SEARCH_CONDITION	R_OWNER	R_CONSTRAINT_NAME	DELETE_RULE	STATUS	DEFERRABLE	DEFERRED	VALIDATE
SCOTT	RPK	P	RIDER	-	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	VFK	R	RIDER	-	SCOTT	VPK	NO ACTION	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	RFK	R	RIDER	-	SCOTT	OPK	NO ACTION	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE

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

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Table Data Insertion

Screenshot of Oracle Database Express Edition SQL Commands interface.

User SCOTT

Home > SQL > SQL Commands

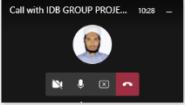
Autocommit: Display: 10

```
select * from passenger
```

Results Explain Describe Saved SQL History

P_ID	P_PHONE	P_BIRTHDATE	P_ADDRESS
103	1684848499	30-OCT-99	KURLI
101	1845454566	22-JUL-99	DHANMONDI
102	1968668622	18-MAY-02	MOTIJHEEL
104	1539090955	26-JUN-96	PALTAN
105	1311406565	23-FEB-98	DHANMONDI

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

Call with IDB GROUP PROJ... 1028 - 

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Windows taskbar at the bottom.

Screenshot of Oracle Database Express Edition SQL Commands interface.

User SCOTT

Home > SQL > SQL Commands

Autocommit: Display: 10

```
SELECT * FROM RNAME
```

Results Explain Describe Saved SQL History

R_ID	R_NAME
801	MAHMUDUL HASAN
802	MEHERAB HASAN
803	SHOYAB KHAN
804	AZIZUL ISLAM
805	ABDULLAH AL MAHDI
806	ABRAR RAHMAN

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

Call with IDB GROUP PR... 010863 - 

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Windows taskbar at the bottom.

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
select * from rider
```

Results Explain Describe Saved SQL History

R_ID	LICENSE_NO	R_PHONE	R_BIRTHDATE	O_ID	V_NUMBER
801	DK1015204555	1951654654	05-MAY-98	302	703
802	CG5561616110	1798465165	07-AUG-95	301	702
803	DK9090954566	1385165169	14-APR-96	303	705
804	DK4415593654	1865484969	29-FEB-96	304	706
805	CG7816593546	1565194906	10-FEB-93	303	704
806	DK9811651496	1765165419	27-DEC-97	302	701

6 rows returned in 0.01 seconds [CSV Export](#)

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User SCOTT

Home > SQL > SQL Commands

Autocommit

```
select * from trip
```

Results Explain Describe Saved SQL History

T_ID	P_ID	R_ID
901	105	805
902	102	806
903	103	803
904	104	804
905	102	801
906	101	805
907	104	803
908	105	802
909	102	804
910	103	806

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

User SCOTT

Home > SQL > SQL Commands

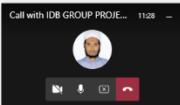
Autocommit

```
select * from office
```

Results **Explain** **Describe** **Saved SQL** **History**

O_ID	O_NAME	O_ADDRESS	O_NUMBER
301	UBBER	BANANI	1943636369
302	PATHAO	GHULSHAN	1851515153
303	OBHAI	MOTIJHEEL	1762626266
304	SHOHOZ	RAMPURA	1398696666

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

Call with IDB GROUP PROJE... 11:28 – 

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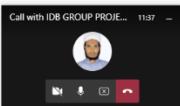
Autocommit

```
select * from contact
```

Results **Explain** **Describe** **Saved SQL** **History**

C_ID	P_ID	O_ID
401	101	304
402	102	302
403	104	301
404	105	304
405	101	303
406	103	302

6 rows returned in 0.01 seconds [CSV Export](#)

Call with IDB GROUP PROJE... 11:37 – 

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Autocommit

```
select * from vehicle
```

Results **Explain** **Describe** **Saved SQL** **History**

V_NUMBER	M_ID	E_ID
701	503	602
702	501	603
703	502	601
704	502	605
705	503	601
706	501	604

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

Language: en-us Application Express 2.1.0.0.39
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Home > SQL > SQL Commands

Autocommit

```
select * from vmb
```

Results **Explain** **Describe** **Saved SQL** **History**

M_ID	MODEL	BRAND	V_TYPE
501	APACHE	TVS	MOTORCYCLE
502	PREMIO	TOYOTA	CAR
503	LIVO	HONDA	MOTORCYCLE
504	COROLLA	TOYOTA	CAR

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

Language: en-us Application Express 2.1.0.0.39
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User SCOTT

Home > SQL > SQL Commands

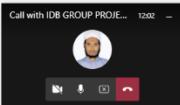
Autocommit

```
select * from ename
```

Results Explain Describe Saved SQL History

E_ID	E_NAME
601	TAMIM KARIM
602	MOINUL ISLAM
603	JUBAYER CHOWDHURY
604	FAZLY RABBI
605	NAZMUL HOSSAIN

5 rows returned in 0.01 seconds [CSV Export](#)

Call with IDB GROUP PROJE... 1202 – 

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User SCOTT

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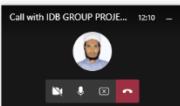
Autocommit

```
select * from employee
```

Results Explain Describe Saved SQL History

E_ID	E_BIRTHDATE	E_PHONE	E_ADDRESS	E_SALARY	E_BONUS	O_ID
601	10-NOV-95	1975566221	MOTIJHEEL	15000	2000	301
602	05-JUL-92	1954545453	RAMPURA	20000	500	303
603	18-AUG-97	1832626266	KURIL	18000	1000	304
604	02-FEB-99	1712525255	SAVAR	17000	800	302
605	06-APR-00	1456565666	MOTIJHEEL	18000	500	303

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

Call with IDB GROUP PROJE... 1210 – 

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User SCOTT

Home > SQL > SQL Commands

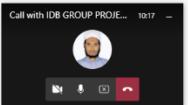
Autocommit

```
select * from pname
```

Results Explain Describe Saved SQL History

P_ID	P_NAME
101	MUHAMMED NAHID
102	MONKIR CHOWDHURY
103	FAHIM MUNTASIR
104	SHAHREAR AHAMMED NIHAI
105	MEHEDI IBNE SHARIF

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

Call with IDB GROUP PROJE... 10:17 – 

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Using Constraint

User SCOTT

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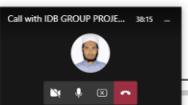
Autocommit

```
Select *
from all_constraints
where table_name='EMPLOYEE'
```

Results Explain Describe Saved SQL History

OWNER	CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME	SEARCH_CONDITION	R_OWNER	R_CONSTRAINT_NAME	DELETE_RULE	STATUS	DEFERRABLE	DEFERRED	VALIDATE
SCOTT	EPK	P	EMPLOYEE	-	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	OFK	R	EMPLOYEE	-	SCOTT	OPK	NO ACTION	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	EP_U	U	EMPLOYEE	-	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE
SCOTT	SYS_C005222	C	EMPLOYEE	"E_SALARY" IS NOT NULL	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE	VALIDATE

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

Call with IDB GROUP PROJE... 38:15 – 

Language: en-us Application Express 2.1.0.0.39 Copyright © 1999, 2006, Oracle. All rights reserved.

Screenshot of Oracle Database Express Edition SQL Commands interface showing the description of the EMPLOYEE table.

```
desc EMPLOYEE
```

The results show the following table structure:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPLOYEE	E_ID	Number	-	10	0	1	-	-	-
	E_BIRTHDATE	Date	7	-	-	-	✓	-	-
	E_PHONE	Number	-	11	0	-	✓	-	-
	E_ADDRESS	Varchar2	25	-	-	-	✓	-	-
	E_SALARY	Number	-	7	0	-			
	E_BONUS	Number	-	7	0	-	✓	-	-
	O_ID	Number	-	10	0	-	✓	-	-

A red box highlights the 'Nullable' column for the E_SALARY row, with a blue arrow pointing to the text "Not Null".

Using Sequence

Screenshot of Oracle Database Express Edition SQL Commands interface showing the selection of user_sequences.

```
SELECT * FROM user_sequences
```

The results show the following sequence details:

SEQUENCE_NAME	MIN_VALUE	MAX_VALUE	INCREMENT_BY	CYCLE_FLAG	ORDER_FLAG	CACHE_SIZE	LAST_NUMBER
RS	807	899	1	N	N	0	810
BOOKSQ4	70	100	4	Y	N	0	104
T_SEQ	1	102	3	N	N	0	98

3 rows returned in 0.08 seconds

Language: en-us

Some Valid Query Questions

1. Display employee id and employee name who manage motorcycle type vehicle
2. Display riders id, name, birthdate who rides car.
3. Display passenger name who are born after 1997.
4. Display the employee id, name and their office id, name and office location for all employees as department location wise.
5. Display the rider id, name along with their vehicle type, vehicle model and vehicle brand who ride Toyota brand vehicle or vehicle model is Apache.
6. Display the vehicle number, brand and model along their manager id and name where employee works for Obhai.
7. Display the employee id, name and salary who gets salary less than average salary.
8. Create sequence named sv_id. Increment by 3, Max value 780, starts with 750, cycle, minvalue 707 & no cache.
9. Set mobile number of the passengers not null unique.
10. Create sequence named so_id. Increment by 2, Max value 350, starts with 305, nominvalue, nocycle & no cache.
11. Set employee salary as default 15000 taka and bonus as default 0 taka.