



AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Summer 2020-2021

Section:

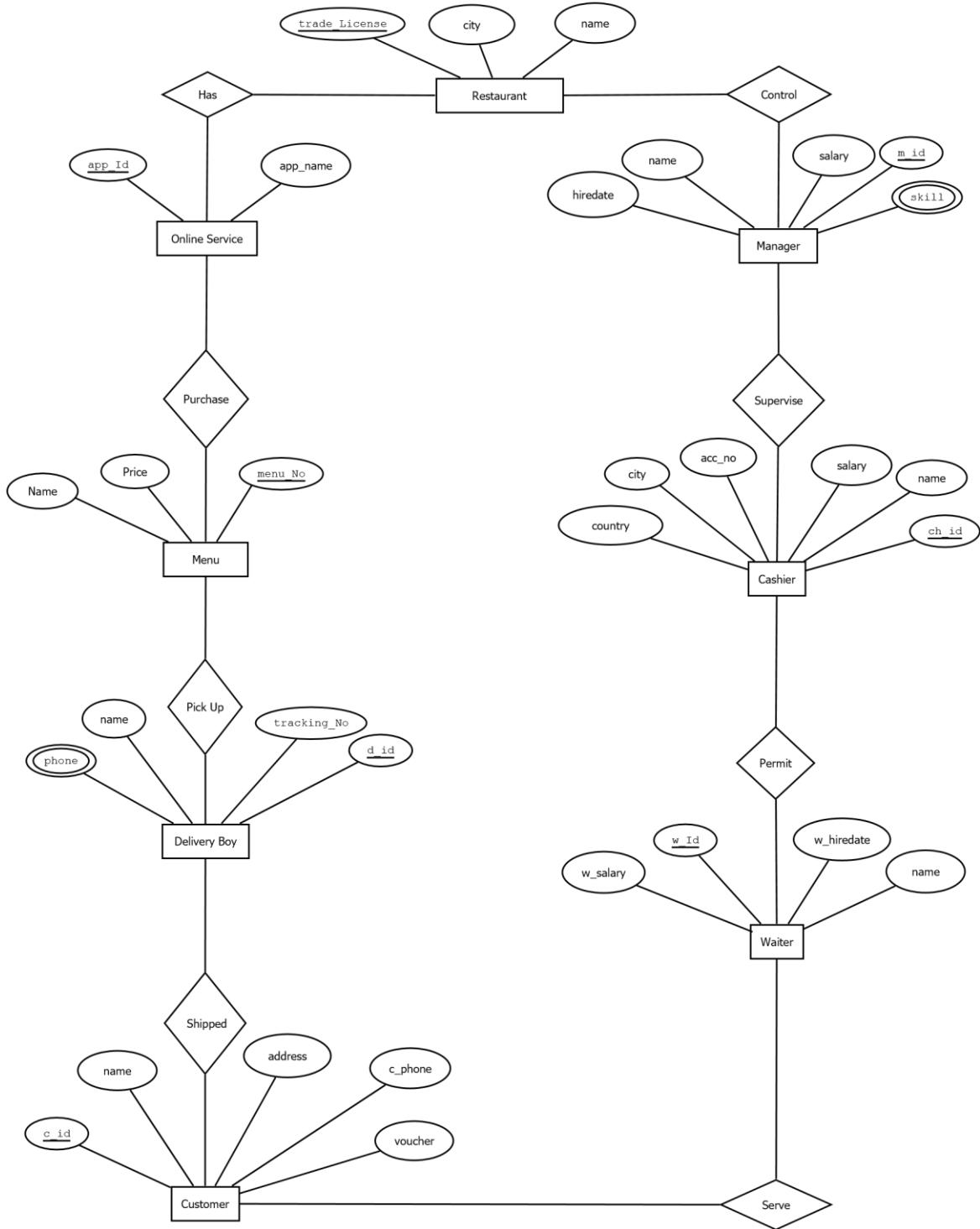
Introduction to database project:

Restaurant Management System

Description

1. In restaurant management system restaurant will be uniquely identified by license_no, city and name.
2. Restaurants are controlled by a manager who will be identified by unique id, name, salary, and hire date.
3. A cashier is supervised by a manager who will be identified by name, salary, unique ch_id, acc_no and city.
4. A cashier can permit many waiters. Waiter has name, salary, hire date and a unique w_id.
5. Waiters serve to the different types of customers. Customers are identified by name, address, a unique c_id and a voucher.
6. Customers ship a delivery boy to take their order. Delivery boy has unique tracking_no, phone, name, and unique d_id.
7. A delivery boy picks up different items from menu to deliver to the customer. Menu has menu_no, and it will also store price and name.
8. These different types of items from menu are purchased by different customers by using online service. For online service, there are many app identified by app name and unique app_id.

Er Diagram



Normalization

Restaurant<has>Online service

HAS –

(**trade_license**, city, name, **app_id**, app_name)

1NF: no multivalued attribute

2NF: **trade_license**, city, name
app_id, app_name

3NF: No transitive dependency
trade_license, city, name
app_id, app_name

Tables for has:

1. **trade_license**, city, name
2. **app_id**, app_name, **trade_license**

Online service<purchase>Menu

Purchase –

(**app_id**, app_name, **menu_no**, name, price,)

1NF: no multivalued attribute

2NF: **App_id**, app-name
Menu_no, name, price

3NF: No transitive dependency
App_id, app_name
Menu_no, name, price

Final list for purchase:

3. **App-id**, app_name
4. **menu_no**, name, price,

5. **n_id,app_id, menu_no**

Menu<pick up>Delivery boy

Pick up –

(menu_no, name, price, d_id, name, phone, tracking_no)

1NF: phone is a multivalued attribute

2NF: menu_no, name, price
d_id, name, phone, tracking_no

3NF: No transitive dependency

menu_no, name, price
d_id, name, phone, tracking_no

Final list for pick up:

6. menu_no, name, price, d_id
7. d_id, name, tracking_no
8. d_id, phone - Composite pk

Delivery boy<Shipped>Customer

Shipped-

(d_id, name, phone, tracking_no, c_id, name, voucher, c_phone, address)

1NF: phone is a multivalued attribute

2NF: d_id, name, phone, tracking_no
c_id, name, voucher, c_phone, address

3NF: No transitive dependency

d_id, name, phone, tracking_no
c_id, name, voucher, c_phone, address

Final list for shipped:

9. d_id, name, phone, tracking-no
10. c_id, name, voucher, c_phone, address ,d_id

11. d_id, phone- Composite pk

Customer<serve>Waiter

Serve-

(c_id, name, voucher, c_phone, address, w_id, name, w_salary, w_hiredate)

1NF: no multivalued attribute

2NF: c_id, name, voucher, c_phone, address
w_id, name, w_salary, w_hiredate

3NF: No transitive dependency

c_id, name, voucher, c_phone, address
w_id, name, w_salary, w-hiredate

Final list for serve:

12. c_id, name, voucher, c_phone, address
13. w_id, name, w_salary, w-hiredate
14. s_id ,c_id, w_id

Waiter<permit>Cashier

Permit-

(w_id, name, w_salary, w-hiredate, ch_id, name, acc_no, salary, city, country)

1NF: no multivalued attribute

2NF: w_id, name, w_salary, w-hiredate
ch_id, name, acc_no, salary, city, country

3NF: w_id, name, w_salary, w-hiredate
ch_id, name, acc_no, salary
cc_id, city, country

Final list for serve:

15. w_id, name, w_salary, w-hiredate, ch_id

16.ch_id, name, acc_no, salary,cc_id

17.cc_id,city, country

Cashier<supervise>Manger

Supervise-

(ch_id, name, acc_no, salary, city, country, m_id, name, salary, hiredate, skill)

1NF: Skill is a multivalued attribute

2NF: ch_id, name, acc_no, salary, city, country
m_id, name, salary, hiredate, skill

3NF: ch_id, name, acc_no, salary
cc_id, city, country
m_id, name, salary, hiredate, skill

Final list for supervise:

18.ch_id, name, acc_no, salary,cc_id,m_id,
19.cc_id,city, country
20.m_id, name, salary, hiredate,
21.skill, m_id- Composite pk

Manger<control>Restaurant

Control-

(m_id, name, salary, hiredate, skill, trade_license, city, name)

1NF: Skill is a multivalued attribute

2NF: m_id, name, salary, hiredate, skill
trade_license, city, name

3NF: No transitive dependency
m_id, name, salary, hiredate, skill
trade_license, city, name

Final list for control:

22. `m_id`, name, salary, hiredate, `trade_license`
23. skill, `m_id`- Composite pk
24. `trade_license`, city, name

Final list form normalization

1. `trade_license`, city, name->RESTAURANT
2. `app_id`, app_name, `trade_license`->ONLINE SERVICE
3. `n_id`, `app_id`, `menu_no`-> ONLINE INFO
4. `menu_no`, name, price, `d_id`->MENU
5. `d_id`, phone- Composite pk-> SUPPLIER
6. `d_id`, name, phone, tracking-no->DELIVERY BOY
7. `c_id`, name, voucher, `c_phone`, address ,`d_id`->CUSTOMER
8. `s_id` ,`c_id`, `w_id`-> CUSTOMER INFO
9. `w_id`, name, w_salary, w-hiredate, `ch_id`->WAITER
10. `cc_id`, city, country-> CASHIER INFO
11. `ch_id`, name, acc_no, salary, `cc_id`, `m_id`->CASHIER
12. `m_id` ,skill- Composite pk-> MANAGER INFO
13. `m_id`, name, salary, hiredate, `trade_license`->MANAGER

Table Creation

Description restaurant Table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

```
Autocommit Display 10
create table restaurant (trade_license number (20), city varchar2(30), name varchar2(50))
alter table restaurant add constraint restaurant_pk primary key (trade_license)
desc restaurant
```

Save Run

Results Explain Describe Saved SQL History

Object Type TABLE Object RESTAURANT

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
RESTAURANT	TRADE_LICENSE	Number	-	20	0	1	-	-	
	CITY	Varchar2	30	-	-	-	✓	-	-
	NAME	Varchar2	50	-	-	-	✓	-	-

1 - 3

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

1035 PM 09-August-2021

Description online service table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

```
Autocommit Display 10
create table online_service (app_id number(10), app_name varchar2(30), trade_license number(20))
alter table online_service add constraint online_pk primary key(app_id)
alter table online_service add constraint online_fk foreign key(trade_license) references restaurant(trade_license)
desc online_service
```

Save Run

Results Explain Describe Saved SQL History

Object Type TABLE Object ONLINE_SERVICE

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ONLINE_SERVICE	APP_ID	Number	-	10	0	1	-	-	
	APP_NAME	Varchar2	30	-	-	-	✓	-	-
	TRADE_LICENSE	Number	-	20	0	-	✓	-	-

1 - 3

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

1046 PM 09-August-2021

Description manager table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
create table manager ( m_id number(10), name varchar2(50), salary number(20), hiredate varchar2(40), trade_license number(20))
alter table manager add constraint manager_pk primary key(m_id)
alter table manager add constraint manager_fk foreign key(trade_license) references restaurant (trade_license)
desc manager
```

Results Explain Describe Saved SQL History

Object Type TABLE Object MANAGER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
MANAGER	M_ID	Number	-	10	0	1	-	-	-
	NAME	Varchar2	50	-	-	-	✓	-	-
	SALARY	Number	-	20	0	-	✓	-	-
	HIREDATE	Varchar2	40	-	-	-	✓	-	-
	TRADE_LICENSE	Number	-	20	0	-	✓	-	-

1 - 5

Application Express 2.1.0.00.39
12:05 AM 10-August-2021

Description manager info table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
create table manager_info( m_id number(10), skill varchar2(30))
alter table manager_info add constraint managerinfo_pk primary key(m_id)
desc manager.info
```

Results Explain Describe Saved SQL History

Object Type TABLE Object MANAGER_INFO

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
MANAGER_INFO	M_ID	Number	-	10	0	1	-	-	-
	SKILL	Varchar2	30	-	-	-	✓	-	-

1 - 2

Language: en-us Application Express 2.1.0.00.39
Copyright © 1999, 2006, Oracle. All rights reserved.

10:52 PM 09-August-2021

Description cashier info table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
create table cashier_info( cc_id number(10), city varchar2(30), country varchar2(30))
alter table cashier_info add constraint cashierinfo_pk primary key(cc_id)
desc cashier_info
```

Results Explain Describe Saved SQL History

Object Type TABLE Object CASHIER_INFO

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CASHIER_INFO	CC_ID	Number	-	10	0	1	-	-	-
	CITY	Varchar2	30	-	-	-	✓	-	-
	COUNTRY	Varchar2	30	-	-	-	✓	-	-

1 - 3

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

1054 PM 09-August-2021

Description cashier table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
create table cashier( ch_id number(10), name varchar2(50), acc_no number(20), salary decimal (5,2), cc_id number(10), m_id number(10))
alter table cashier add constraint cashier_pk primary key(ch_id)
alter table cashier add constraint cashier_fk foreign key(cc_id) references cashier_info (cc_id)

desc cashier
```

Results Explain Describe Saved SQL History

Object Type TABLE Object CASHIER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CASHIER	CH_ID	Number	-	10	0	1	-	-	-
	NAME	Varchar2	50	-	-	-	✓	-	-
	ACC_NO	Number	-	20	0	-	✓	-	-
	SALARY	Number	-	5	2	-	✓	-	-
	CC_ID	Number	-	10	0	-	✓	-	-
	M_ID	Number	-	10	0	-	✓	-	-

1 - 6

1055 PM 09-August-2021

Description waiter table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
create table waiter( w_id number(10), w_salary decimal (5,2), w_hiredate varchar2(30), ch_id number(10))
alter table waiter add constraint waiter_pk primary key(w_id)
alter table waiter add constraint waiter_fk foreign key(ch_id) references cashier (ch_id)
desc waiter
```

Results Explain Describe Saved SQL History

Object Type TABLE Object WAITER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
WAITER	W_ID	Number	-	10	0	1	-	-	-
	W_SALARY	Number	-	5	2	-	✓	-	-
	W_HIREDATE	Varchar2	30	-	-	-	✓	-	-
	CH_ID	Number	-	10	0	-	✓	-	-

1 - 4

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

11:00 PM 09-August-2021

Description Delivery boy table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
create table delivery_boy(d_id number(10), name varchar2(30), phone varchar2(40), tracking_no number(30))
alter table delivery_boy add constraint deliveryboy_pk primary key(d_id)
alter table delivery_boy add constraint tno unique(tracking_no)
desc delivery_boy
```

Results Explain Describe Saved SQL History

Object Type TABLE Object DELIVERY_BOY

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DELIVERY_BOY	D_ID	Number	-	10	0	1	-	-	-
	NAME	Varchar2	30	-	-	-	✓	-	-
	PHONE	Varchar2	40	-	-	-	✓	-	-
	TRACKING_NO	Number	-	30	0	-	✓	-	-

1 - 4

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

11:06 PM 09-August-2021

Constraint

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
create table delivery_boy(d_id number(10), name varchar2(30), phone varchar2(40), tracking_no number(30))
alter table delivery_boy add constraint deliveryboy_pk primary key(d_id)
alter table delivery_boy add constraint tno unique(tracking_no)
desc delivery_boy

select *
from all_constraints
where table_name='DELIVERY_BOY'
```

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
SCOTT	DELIVERYBOY_PK	P	DELIVERY_BOY	-	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE
SCOTT	TNO	U	DELIVERY_BOY	-	-	-	-	ENABLED	NOT DEFERRABLE	IMMEDIATE

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

Application Express 2.1 0.0.39
Copyright © 1999, 2006, Oracle. All rights reserved.

11:16 PM 09-August-2021

Description customer table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
create table customer (c_id number(10), name varchar2(30), voucher varchar2(40), c_phone varchar2(30), address varchar2(50), d_id number(30))
alter table customer add constraint customer_pk primary key(c_id)
alter table customer add constraint customer_fk foreign key(d_id) references delivery_boy(d_id)
alter table customer modify voucher default 100
desc customer
```

Results Explain Describe Saved SQL History

Object Type TABLE Object CUSTOMER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CUSTOMER	C_ID	Number	-	10	0	1	-	-	-
	NAME	Varchar2	30	-	-	-	✓	-	-
	VOUCHER	Varchar2	40	-	-	-	✓	100	-
	C_PHONE	Varchar2	30	-	-	-	✓	-	-
	ADDRESS	Varchar2	50	-	-	-	✓	-	-
	D_ID	Number	-	30	0	-	✓	-	-

1 - 6

11:20 PM 09-August-2021

Description customer info table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
create table customer_info( s_id number(10), c_id number (10), w_id number (10))
alter table customer_info add constraint customerinfo_pk primary key(s_id)
alter table customer_info add constraint customerinfo_fk foreign key(s_id) references customer (c_id)
alter table customer_info add constraint customerinfo2_fk foreign key(w_id) references waiter (w_id)
desc customer info
```

Results Explain Describe Saved SQL History

Object Type TABLE Object CUSTOMER_INFO

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CUSTOMER_INFO	S_ID	Number	-	10	0	1	-	-	-
	C_ID	Number	-	10	0	-	✓	-	-
	W_ID	Number	-	10	0	-	✓	-	-

1 - 3

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

11:22 PM 09-August-2021

Description supplier table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
create table supplier (d_id number(10), phone varchar2(30))
alter table supplier add constraint supplier_pk primary key(d_id)
desc supplier
```

Results Explain Describe Saved SQL History

Object Type TABLE Object SUPPLIER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SUPPLIER	D_ID	Number	-	10	0	1	-	-	-
	PHONE	Varchar2	30	-	-	-	✓	-	-

1 - 2

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

11:24 PM 09-August-2021

Description menu table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
create table menu(menu_no number(10), name varchar2(30), price varchar2(40), d_id number(10))
alter table menu add constraint menu_pk primary key(menu_no)
alter table menu add constraint menu_fk foreign key(d_id) references delivery_boy(d_id)
desc menu
```

Results Explain Describe Saved SQL History

Object Type TABLE Object MENU

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
MENU	MENU_NO	Number	-	10	0	1	-	-	-
	NAME	Varchar2	30	-	-	-	✓	-	-
	PRICE	Varchar2	40	-	-	-	✓	-	-
	D_ID	Number	-	10	0	-	✓	-	-

1 - 4

Language: en-us Application Express 2.1.0.00.39
Copyright © 1999, 2006, Oracle. All rights reserved.

11:26 PM 09-August-2021

Description online info table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
create table online_info(n_id number(10), app_id number(30), menu_no number (30))
alter table online_info add constraint onlineinfo_pk primary key(n_id)
alter table online_info add constraint onlineinfo_fk foreign key(app_id) references online_service(app_id)
desc online info
```

Results Explain Describe Saved SQL History

Object Type TABLE Object ONLINE_INFO

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ONLINE_INFO	N_ID	Number	-	10	0	1	-	-	-
	APP_ID	Number	-	30	0	-	✓	-	-
	MENU_NO	Number	-	30	0	-	✓	-	-

1 - 3

Language: en-us Application Express 2.1.0.00.39
Copyright © 1999, 2006, Oracle. All rights reserved.

11:29 PM 09-August-2021

Sequence

ORACLE Database Express Edition

User SCOTT

Home > SQL > **SQL Commands**

Autocommit Display 10

```
desc online_info
create sequence info_seq
start with 199
increment by 1
maxvalue 1000
nocycle
nocache

select *
from user_sequences
```

Results Explain Describe Saved SQL History

SEQUENCE_NAME	MIN_VALUE	MAX_VALUE	INCREMENT_BY	CYCLE_FLAG	ORDER_FLAG	CACHE_SIZE	LAST_NUMBER
T_SEQ	1	100	1	N	N	0	90
INFO_SEQ	1	1000	1	N	N	0	199

2 rows returned in 0.08 seconds [CSV Export](#)

Application Express 2.1.0.00.39
Copyright © 1999, 2006, Oracle. All rights reserved.

Language: en-us

Windows taskbar: 11:31 PM 09-August-2021

Value insertion

Restaurant table

ORACLE Database Express Edition

User SCOTT

Home > SQL > **SQL Commands**

Autocommit Display 10

```
insert into restaurant values (48648465, 'Dhaka', 'The_Devil')
insert into restaurant values (64864868, 'Sylhet', 'Chill_Out')
insert into restaurant values (87648465, 'Khulna', 'Chef_Table')
insert into restaurant values (18754757, 'Narsingdi', 'Cafe_House')
insert into restaurant values (43746776, 'Dhaka', 'Bhorta_House')

select *
from restaurant
```

Results Explain Describe Saved SQL History

TRADE_LICENSE	CITY	NAME
48648465	Dhaka	The_Devil
64864868	Sylhet	Chill_Out
87648465	Khulna	Chef_Table
18754757	Narsingdi	Cafe_House
43746776	Dhaka	Bhorta_House

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

Application Express 2.1.0.00.39
Copyright © 1999, 2006, Oracle. All rights reserved.

Language: en-us

Windows taskbar: 11:34 PM 09-August-2021

Online service table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

```
 Autocommit Display 10 ▾
insert into online_service values (111, 'Uber_Eats', 48648465)
insert into online_service values (222, 'Hungry_Naki', 64864868)
insert into online_service values (333, 'Food_Panda', 87648465)
insert into online_service values (444, 'Pathao', 18754757)
insert into online_service values (555, 'E_Food', 43746776)

select *
from online_service
```

Save Run

Results Explain Describe Saved SQL History

APP_ID	APP_NAME	TRADE_LICENSE
111	Uber_Eats	48648465
222	Hungry_Naki	64864868
333	Food_Panda	87648465
444	Pathao	18754757
555	E_Food	43746776

5 rows returned in 0.11 seconds CSV Export

Application Express 2.1.0.0.39
Copyright © 1999, 2006, Oracle. All rights reserved.

Language: en-us

11:37 PM 09-August-2021

Manager table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

```
 Autocommit Display 10 ▾
insert into manager values (101, 'Rijom', 10000, '20-01-2020', 48648465)
insert into manager values (102, 'Nafisa', 23473, '01-01-2020', 64864868)
insert into manager values (103, 'Riad', 36643, '28-01-2020', 87648465)
insert into manager values (104, 'Anika', 53548, '12-03-2021', 18754757)
insert into manager values (105, 'Tanvir', 65659, '20-01-2020', 43746776)

select *
from manager
```

Save Run

Results Explain Describe Saved SQL History

M_ID	NAME	SALARY	HIREDATE	TRADE_LICENSE
101	Rijom	10000	20-01-2020	48648465
102	Nafisa	23473	01-01-2020	64864868
103	Riad	36643	20-01-2020	87648465
104	Anika	53548	12-03-2021	18754757
105	Tanvir	65659	20-01-2020	43746776

5 rows returned in 0.02 seconds CSV Export

Application Express 2.1.0.0.39
Copyright © 1999, 2006, Oracle. All rights reserved.

Language: en-us

12:10 AM 10-August-2021

Manager info table

ORACLE® Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
insert into manager_info values (101, 'Customer_Service')
insert into manager_info values (102, 'Flexibility')
insert into manager_info values (103, 'Flexibility')
insert into manager_info values (104, 'Good_Personality')
insert into manager_info values (105, 'Customer_Service')

select *
from manager_info
```

Results Explain Describe Saved SQL History

M_ID	SKILL
101	Customer_Service
102	Flexibility
103	Flexibility
104	Good_Personality
105	Customer_Service

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

Language: en-us Application Express 2.1.0.00.39 Copyright © 1999, 2006, Oracle. All rights reserved.

12:13 AM 10-August-2021

Cashier info table

ORACLE® Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit Display 10

```
insert into cashier_info values (201, 'Narsingdi', 'Bangladesh')
insert into cashier_info values (202, 'Khulna', 'Bangladesh')
insert into cashier_info values (203, 'Dhaka', 'Bangladesh')
insert into cashier_info values (204, 'Sylhet', 'Bangladesh')
insert into cashier_info values (205, 'Narsingdi', 'Bangladesh')

select *
from cashier_info
```

Results Explain Describe Saved SQL History

CC_ID	CITY	COUNTRY
201	Narsingdi	Bangladesh
202	Khulna	Bangladesh
203	Dhaka	Bangladesh
204	Sylhet	Bangladesh
205	Narsingdi	Bangladesh

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

Language: en-us Application Express 2.1.0.00.39 Copyright © 1999, 2006, Oracle. All rights reserved.

12:17 AM 10-August-2021

Cashier table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
insert into cashier values (43862, 'Rijom', '015712', 736.42, 201, 101)
insert into cashier values (42356, 'Nafisa', '018253', 976.7, 202, 102)
insert into cashier values (40236, 'Riad', '017527', 987.2, 203, 103)
insert into cashier values (44003, 'Anika', '016986', 456.8, 204, 104)
insert into cashier values (41227, 'Tanvir', '017772', 947.3, 205, 105)

select *
from cashier
```

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

CH_ID	NAME	ACC_NO	SALARY	CC_ID	M_ID
43862	Rijom	15712	736.42	201	101
42356	Nafisa	18253	976.7	202	102
40236	Riad	17527	987.2	203	103
44003	Anika	16986	456.8	204	104
41227	Tanvir	17772	947.3	205	105

5 rows returned in 0.04 seconds [CSV Export](#)

Application Express 2.1 0 00 39
Copyright © 1999, 2006, Oracle. All rights reserved.

Language: en-us 1222 AM
10-August-2021

Waiter table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
insert into waiter values (4386, 157.7, '01-01-2021', 43862)
insert into waiter values (4235, 185.56, '01-01-2021', 42356)
insert into waiter values (4023, 752.45, '01-07-2019', 40236)
insert into waiter values (4400, 198.98, '21-01-2018', 44003)
insert into waiter values (4122, 177.65, '11-09-2019', 41227)

select *
from waiter
```

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

W_ID	W_SALARY	W_HIREDATE	CH_ID
4386	157.7	01-01-2021	43862
4235	185.56	01-01-2021	42356
4023	752.45	01-07-2019	40236
4400	198.98	21-01-2018	44003
4122	177.65	11-09-2019	41227

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

Application Express 2.1 0 00 39
Copyright © 1999, 2006, Oracle. All rights reserved.

Language: en-us 1230 AM
10-August-2021

Delivery boy table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
insert into delivery_boy values (43862, 'Rijom', '01571219976', 7364)
insert into delivery_boy values (42356, 'Nafisa', '01825324413', 9767)
insert into delivery_boy values (40236, 'Riad', '01752737991', 9876)
insert into delivery_boy values (44003, 'Anika', '01698686754', 4565)
insert into delivery_boy values (41227, 'Tanvir', '01777242851', 9475)

select *
from delivery_boy
```

D_ID	NAME	PHONE	TRACKING_NO
43862	Rijom	01571219976	7364
42356	Nafisa	01825324413	9767
40236	Riad	01752737991	9876
44003	Anika	01698686754	4565
41227	Tanvir	01777242851	9475

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

Application Express 2.1.0.00.39
Copyright © 1999, 2006, Oracle. All rights reserved.

Language: en-us 12:33 AM
10-August-2021

Customer table

ORACLE Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
insert into customer(c_id, name, c_phone, address, d_id) values (862, 'Rijom', '01571219976', 'Narsingdi', 43862)
insert into customer values (356, 'Nafisa', null, '01825324413', 'Dhaka', 42356)
insert into customer(c_id, name, c_phone, address, d_id) values (236, 'Riad', '01752737991', 'Narayangonj', 40236)
insert into customer values (003, 'Anika', 50, '01698686754', 'Dhaka', 44003)
insert into customer values (227, 'Tanvir', null, '01777242851', 'Mirpur', 41227)

select *
from customer
```

C_ID	NAME	VOUCHER	C_PHONE	ADDRESS	D_ID
236	Riad	100	01752737991	Narayangonj	40236
3	Anika	50	01698686754	Dhaka	44003
862	Rijom	100	01571219976	Narsingdi	43862
356	Nafisa	-	01825324413	Dhaka	42356
227	Tanvir	-	01777242851	Mirpur	41227

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

Application Express 2.1.0.00.39
Copyright © 1999, 2006, Oracle. All rights reserved.

Language: en-us 1:02 AM
10-August-2021

Customer info table

ORACLE® Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
insert into customer_info values (303, 862, 4386)
insert into customer_info values (304, 356, 4235)
insert into customer_info values (305, 236, 4023)
insert into customer_info values (306, 003, 4400)
insert into customer_info values (307, 227, 4122)

select *
from customer_info
```

S_ID	C_ID	W_ID
303	862	4386
304	356	4235
305	236	4023
306	3	4400
307	227	4122

5 rows returned in 0.00 seconds

Application Express 2.1.0.0.39
Copyright © 1999, 2006, Oracle. All rights reserved.

Language: en-us 10-August-2021

Supplier table

ORACLE® Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
insert into supplier values (43862, '01571219976')
insert into supplier values (42356, '01825324413')
insert into supplier values (40236, '01752737991')
insert into supplier values (44003, '01698686754')
insert into supplier values (41227, '01777242851')

select *
from supplier
```

D_ID	PHONE
43862	01571219976
42356	01825324413
40236	01752737991
44003	01698686754
41227	01777242851

5 rows returned in 0.00 seconds

Language: en-us 10-August-2021

ESiF INTERNET SECURITY
⚠ Update authorization failed. Please check if your license is valid.
[Learn more about this message](#)
[Renew license](#) Your computer Application Express 2.1.0.0.39
 Copyright © 1999, 2006, Oracle. All rights reserved.

Menu table

ORACLE® Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
insert into menu values (01, 'Burger', '110', 43862)
insert into menu values (02, 'Sandwich', '100', 42356)
insert into menu values (03, 'Coffee', '210', 40236)
insert into menu values (04, 'Pizza', '340', 44003)
insert into menu values (05, 'Pasta', '180', 41227)

select *
from menu
```

MENU_NO	NAME	PRICE	D_ID
1	Burger	110	43862
2	Sandwich	100	42356
3	Coffee	210	40236
4	Pizza	340	44003
5	Pasta	180	41227

5 rows returned in 0.02 seconds

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

10-August-2021 1:09 AM

Online info table

ORACLE® Database Express Edition

User SCOTT

Home > SQL > SQL Commands

Autocommit

```
insert into online_info (n_id,app_id,menu_no) values (info_seq.nextval,111,01)
insert into online_info (n_id,app_id,menu_no) values (info_seq.nextval,222,02)
insert into online_info (n_id,app_id,menu_no) values (info_seq.nextval,333,03)
insert into online_info (n_id,app_id,menu_no) values (info_seq.nextval,444,04)
insert into online_info (n_id,app_id,menu_no) values (info_seq.nextval,555,05)

select *
from online_info
```

N_ID	APP_ID	MENU_NO
199	111	1
200	222	2
201	333	3
202	444	4
203	555	5

5 rows returned in 0.00 seconds

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

10-August-2021 1:11 AM

Question

1. Create a query to display the id,salary of waiters earning more than \$200.
2. Show the information of all manager like "Rijom earn salary \$ 10000".
3. Display the name from cashier table who's name start with R.
4. Display the average salary, maximum salary and minimum salary from cashier table.

5. Display the restaurant name ,trade license and manager salary for all manager.
6. Display city,cashier id and acc no.
7. Dispaly name and salary who has a salary less than acc no 17527.
8. write a query to display waiter id , waiter salary and coloum name hiredate change to join date.

9. Create a Table named Arsenal.
Columns should be->
a_id->number(10) & primary key
a_name->varchar2(20)
j_number->number(10)

- 10.create sequence named arsenalsq. increment by 2, max value 70, starts with 10, no min value, no cycle & no cache.