

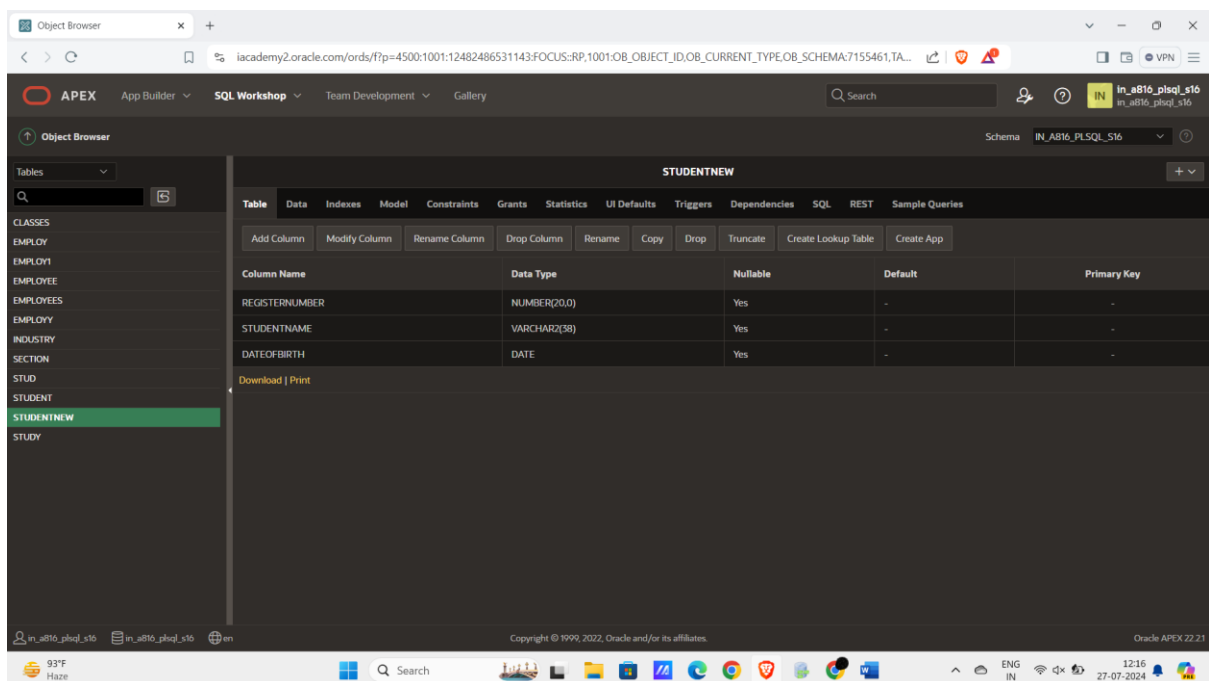
DATABASE MANAGEMENT SYSTEMS SQL PRACTICE -1

NAME: HARINI.R

REGISTER NO: 192324108

COURSE CODE: CSA0564

```
CREATE TABLE StudentNew(registerNumber number(20),  
    StudentName varchar(38),  
    dateOfBirth date);
```



```
ALTER TABLE StudentNew
```

```
ADD bloodGroup varchar(5);
```

Object Browser

iacademy2.oracle.com/ords/f?p=4500:1001:12482486531143::FOCUS:RP,1001:OB_OBJECT_ID,OB_CURRENT_TYPE,OB_SCHEMA:7155461,TA...

APEX App Builder SQL Workshop Team Development Gallery

Object Browser Schema IN_A816_PL_SQL_S16

Tables

CLASSES

EMPLOY

EMPLOY1

EMPLOYEE

EMPLOYEES

EMPLOY2

INDUSTRY

SECTION

STUD

STUDENT

STUDENTNEW

STUDY

STUDENTNEW

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST Sample Queries

Add Column Modify Column Rename Column Drop Column Rename Copy Drop Truncate Create Lookup Table Create App

Column Name	Data Type	Nullable	Default	Primary Key
REGISTERNUMBER	NUMBER(20,0)	Yes	-	-
STUDENTNAME	VARCHAR2(38)	Yes	-	-
DATEOFBIRTH	DATE	Yes	-	-
BLOODGROUP	VARCHAR2(5)	Yes	-	-

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ENG IN

12:24 27-07-2024

ALTER TABLE StudentNew

ADD PRIMARY KEY (registerNumber);

Object Browser

iacademy2.oracle.com/ords/f?p=4500:1001:12482486531143::FOCUS:RP,1001:OB_OBJECT_ID,OB_CURRENT_TYPE,OB_SCHEMA:7155461,TA...

APEX App Builder SQL Workshop Team Development Gallery

Object Browser Schema IN_A816_PL_SQL_S16

Tables

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STUDENTNEW

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST Sample Queries

Add Column Modify Column Rename Column Drop Column Rename Copy Drop Truncate Create Lookup Table Create App

Column Name	Data Type	Nullable	Default	Primary Key
REGISTERNUMBER	NUMBER(20,0)	No	-	1
STUDENTNAME	VARCHAR2(38)	Yes	-	-
DATEOFBIRTH	DATE	Yes	-	-
BLOODGROUP	VARCHAR2(5)	Yes	-	-

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12:38 27-07-2024

ALTER TABLE StudentNew

ADD oldSchool varchar(40);

Object Browser

iacademy2.oracle.com/ords/f?p=4500:1001:12482486531143::FOCUS:RP,1001:OB_OBJECT_ID,OB_CURRENT_TYPE,OB_SCHEMA:7155461,TA...

APEX App Builder SQL Workshop Team Development Gallery

Object Browser Schema IN_A816_PL_SQL_S16

Tables

CLASSES
EMPLOY
EMPLOY1
EMPLOYEE
EMPLOYEES
EMPLOY2
INDUSTRY
SECTION
STUD
STUDENT
STUDENTNEW
STUDY

STUDENTNEW

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST Sample Queries

Add Column Modify Column Rename Column Drop Column Rename Copy Drop Truncate Create Lookup Table Create App

Column Name	Data Type	Nullable	Default	Primary Key
REGISTERNUMBER	NUMBER(20,0)	No	-	1
STUDENTNAME	VARCHAR2(38)	Yes	-	-
DATEOFBIRTH	DATE	Yes	-	-
BLOODGROUP	VARCHAR2(5)	Yes	-	-
OLDSCHOOL	VARCHAR2(40)	Yes	-	-

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ENG IN 12:43 27-07-2024

ALTER TABLE StudentNew

DROP (oldSchool);

Object Browser

iacademy2.oracle.com/ords/f?p=4500:1001:12482486531143::FOCUS:RP,1001:OB_OBJECT_ID,OB_CURRENT_TYPE,OB_SCHEMA:7155461,TA...

APEX App Builder SQL Workshop Team Development Gallery

Object Browser Schema IN_A816_PL_SQL_S16

Tables

CLASSES
EMPLOY
EMPLOY1
EMPLOYEE
EMPLOYEES
EMPLOY2
INDUSTRY
SECTION
STUD
STUDENT
STUDENTNEW
STUDY

STUDENTNEW

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST Sample Queries

Add Column Modify Column Rename Column Drop Column Rename Copy Drop Truncate Create Lookup Table Create App

Column Name	Data Type	Nullable	Default	Primary Key
REGISTERNUMBER	NUMBER(20,0)	No	-	1
STUDENTNAME	VARCHAR2(38)	Yes	-	-
DATEOFBIRTH	DATE	Yes	-	-
BLOODGROUP	VARCHAR2(5)	Yes	-	-

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ENG IN 12:45 27-07-2024

ALTER TABLE StudentNew

RENAME COLUMN registerNumber TO RegNo;

Object Browser

Table: STUDENTNEW

Column Name	Data Type	Nullable	Default	Primary Key
REGNO	NUMBER(20,0)	No	-	1
STUDENTNAME	VARCHAR2(38)	Yes	-	-
DATEOFBIRTH	DATE	Yes	-	-
BLOODGROUP	VARCHAR2(5)	Yes	-	-

Download | Print

ALTER TABLE StudentNew

MODIFY StudentName varchar(38) NOT NULL;

Object Browser

Table: STUDENTNEW

Column Name	Data Type	Nullable	Default	Primary Key
REGNO	NUMBER(20,0)	No	-	1
STUDENTNAME	VARCHAR2(38)	No	-	-
DATEOFBIRTH	DATE	Yes	-	-
BLOODGROUP	VARCHAR2(5)	Yes	-	-

Download | Print

ALTER TABLE StudentNew

MODIFY StudentName varchar(25) ;

The screenshot shows the Oracle APEX SQL Workshop interface. The left sidebar displays a list of tables, with 'STUDENTNEW' selected. The main panel shows the table's structure with the following columns:

Column Name	Data Type	Nullable	Default	Primary Key
REGNO	NUMBER(20,0)	No	-	1
STUDENTNAME	VARCHAR2(25)	No	-	-
DATEOFBIRTH	DATE	Yes	-	-
BLOODGROUP	VARCHAR2(5)	Yes	-	-

Below the table structure, there is a 'Download | Print' link.

ALTER TABLE StudentNew

MODIFY dateOfBirth NUMERIC NOT NULL;

The screenshot shows the Oracle APEX SQL Workshop interface after the modification. The table structure is now as follows:

Column Name	Data Type	Nullable	Default	Primary Key
REGNO	NUMBER(20,0)	No	-	1
STUDENTNAME	VARCHAR2(25)	No	-	-
DATEOFBIRTH	NUMBER	No	-	-
BLOODGROUP	VARCHAR2(5)	Yes	-	-

The 'DATEOFBIRTH' column has been changed from 'DATE' to 'NUMBER' and is now 'NOT NULL'.

INSERT INTO StudentNew VALUES(1001,'Dharshini',2005,'A');

INSERT INTO StudentNew VALUES(1002,'Maithreyee',2004,'O');

INSERT INTO StudentNew VALUES(1003,'Priyal',2005,'B');

INSERT INTO StudentNew VALUES(1004,'Harini',2004,'O');

INSERT INTO StudentNew VALUES(1005,'Sarshini',2005,'A');

The screenshot shows the Oracle APEX Object Browser interface. On the left, the 'Object Browser' pane lists various database objects, with 'STUDENTNEW' highlighted under the 'TABLES' section. The main area displays the 'STUDENTNEW' table data. The table has columns: REGNO, STUDENTNAME, DATEOFBIRTH, and BLOODGROUP. The data is as follows:

REGNO	STUDENTNAME	DATEOFBIRTH	BLOODGROUP
1001	Dharshini	2005	A
1002	Maithreyee	2004	O
1003	Priyal	2005	B
1004	Harini	2004	O
1005	Sarshini	2005	A

The interface also shows a 'Download' button and a status bar at the bottom indicating 'row(s) 1 - 5 of 5'.

Primary Constraint check:

The screenshot shows the Oracle APEX SQL Scripts Results page. The script 'Student_New' is shown with a status of 'Complete'. The results table displays the execution of the INSERT statements, including the primary constraint check. The results are as follows:

Number	Elapsed	Statement	Feedback	Rows
1	0.00	INSERT INTO StudentNew VALUES(1001,'Dharshini',2005,'A');	ORA-00001: unique constraint (IN_A816_PLSQL_S16.SYS_C0010490195) violated ORA-06512: at "SYS.DBMS_SQL", line 1721	-
2	0.01	INSERT INTO StudentNew VALUES(1002,'Maithreyee',2004,'O');	ORA-00001: unique constraint (IN_A816_PLSQL_S16.SYS_C0010490195) violated ORA-06512: at "SYS.DBMS_SQL", line 1721	-
3	0.00	INSERT INTO StudentNew VALUES(1003,'Priyal',2005,'B');	Error at line 1/13: ORA-00947: not enough values ORA-06512: at "SYS.WWV_DBMS_SQL_APEX_220200", line 828 ORA-06512: at "SYS.DBMS_SQL", line 1658 ORA-06512: at "SYS.WWV_DBMS_SQL_APEX_220200", line 815 ORA-06512: at "APEX_220200.WWV_FLOW_DYNAMIC_EXEC", line 2046	-
4	0.00	INSERT INTO StudentNew VALUES(1004,'Harini',2004,'O');	ORA-00001: unique constraint (IN_A816_PLSQL_S16.SYS_C0010490195) violated ORA-06512: at "SYS.DBMS_SQL", line 1721	-
5	0.00	INSERT INTO StudentNew VALUES(1005,'Sarshini',2005,'A');	ORA-00001: unique constraint (IN_A816_PLSQL_S16.SYS_C0010490195) violated ORA-06512: at "SYS.DBMS_SQL", line 1721	-

The interface also shows a 'Download' button and a status bar at the bottom indicating 'row(s) 1 - 5 of 5'.

Not Nullable check:

WhatsApp

Results

Overview | Oracle Academ...

Oracle Academy - Login to...

how to change data type o...

SQL ALTER TABLE Statemen...

lacademy2.oracle.com/ords/f?p=4500:1225:3847950827715::...

APEX

App Builder

SQL Workshop

Team Development

Gallery

Search

in_a816_plsql_s16

SQL Scripts | Results

Script: Student_New | Status: Complete | View: Detail | Rows: 15 | Go | Create App | Edit Script

Number	Elapsed	Statement	Feedback	Rows
1	0.00	INSERT INTO StudentNew VALUES(1001,'Dhansini',2005,'A')	ORA-00001: unique constraint (IN_A816_PLSQL_S16.SYS_C0010400195) violated ORA-06512: at "SYS.DBMS_SQL", line 1721	-
2	0.00	INSERT INTO StudentNew VALUES(1002,'Maithreyee',2004,'O')	ORA-00001: unique constraint (IN_A816_PLSQL_S16.SYS_C0010400195) violated ORA-06512: at "SYS.DBMS_SQL", line 1721	-
3	0.00	INSERT INTO StudentNew VALUES(1003,'Priyal',2005,'B')	ORA-00001: unique constraint (IN_A816_PLSQL_S16.SYS_C0010400195) violated ORA-06512: at "SYS.DBMS_SQL", line 1721	-
4	0.00	INSERT INTO StudentNew VALUES(1004,2004,'O')	Error at line 1/13: ORA-00947: not enough values ORA-06512: at "SYS.WWV_DBMS_SQL_APEX_220300", line 828 ORA-06512: at "SYS.DBMS_SQL", line 1658 ORA-06512: at "SYS.WWV_DBMS_SQL_APEX_220300", line 813 ORA-06512: at "APEX_220300.WWV_FLOW_DYNAMIC_EXEC", line 2046	-
5	0.00	INSERT INTO StudentNew VALUES(1005,'Sandeep',2005,'A')	ORA-00001: unique constraint (IN_A816_PLSQL_S16.SYS_C0010400195) violated ORA-06512: at "SYS.DBMS_SQL", line 1721	-

Download

row(s) 1 - 5 of 5

5 Statements Processed

0 Successful

5 With Errors

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Search

ENG IN

13:36 27-07-2024

SELECT *

FROM StudentNew

WHERE dateOfBirth=2004;

WhatsApp

Results

Overview | Oracle Academ...

Oracle Academy - Login to...

how to change data type o...

SQL ALTER TABLE Statemen...

lacademy2.oracle.com/ords/f?p=4500:1225:3847950827715::...

APEX

App Builder

SQL Workshop

Team Development

Gallery

Search

in_a816_plsql_s16

SQL Scripts | Results

Script: Student_New | Status: Complete | View: Detail | Show: Statement | Results | Feedback | Go | Create App | Edit Script

SELECT * FROM StudentNew WHERE dateOfBirth=2004

REGNO	STUDENTNAME	DATEOFBIRTH	BLOODGROUP
1002	Maithreyee	2004	O
1004	Harna	2004	O

2 rows selected. 0.00 seconds

Run By

IN_A816_PLSQL_S16

Parsing Schema

IN_A816_PLSQL_S16

Script Started

Saturday, July 27, 2024

Elapsed time

15 seconds ago

Statements Processed

1

Successful

1

With Errors

0

Download

96°F Haze

Search

ENG IN

14:08 27-07-2024

DELETE FROM StudentNew

WHERE dateOfBirth= 2004;

Object Browser

APEX App Builder SQL Workshop Team Development Gallery

Schema IN_A816_PL_SQL_S16

Object Browser

Tables

CLASSES

EMPLOY

EMPLOY1

EMPLOYEE

EMPLOYEES

EMPLOY2

INDUSTRY

SECTION

STUD

STUDENT

STUDENTNEW

STUDY

STUDENTNEW

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST Sample Queries

Query Count Rows Insert Row Load Data

EDIT	REGNO	STUDENTNAME	DATEOFBIRTH	BLOODGROUP
	1001	Dharshini	2005	A
	1003	Priyal	2005	B
	1005	Sanshini	2005	A

Download

row(s) 1 - 3 of 3

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Search

ENG IN

08:18 29-07-2024

DELETE FROM StudentNew;

Results Overview | Oracle Academy Oracle Academy (2) WhatsApp

APEX App Builder SQL Workshop Team Development Gallery

Script: Student_New Status: Complete

View: Detail Summary Rows: 15 Go

Create App Edit Script

Number	%	Elapsed	Statement	Feedback	Rows
1		0.01	DELETE FROM StudentNew	6 row(s) deleted.	6

Download

row(s) 1 - 1 of 1

1	1	0
Statements Processed	Successful	With Errors

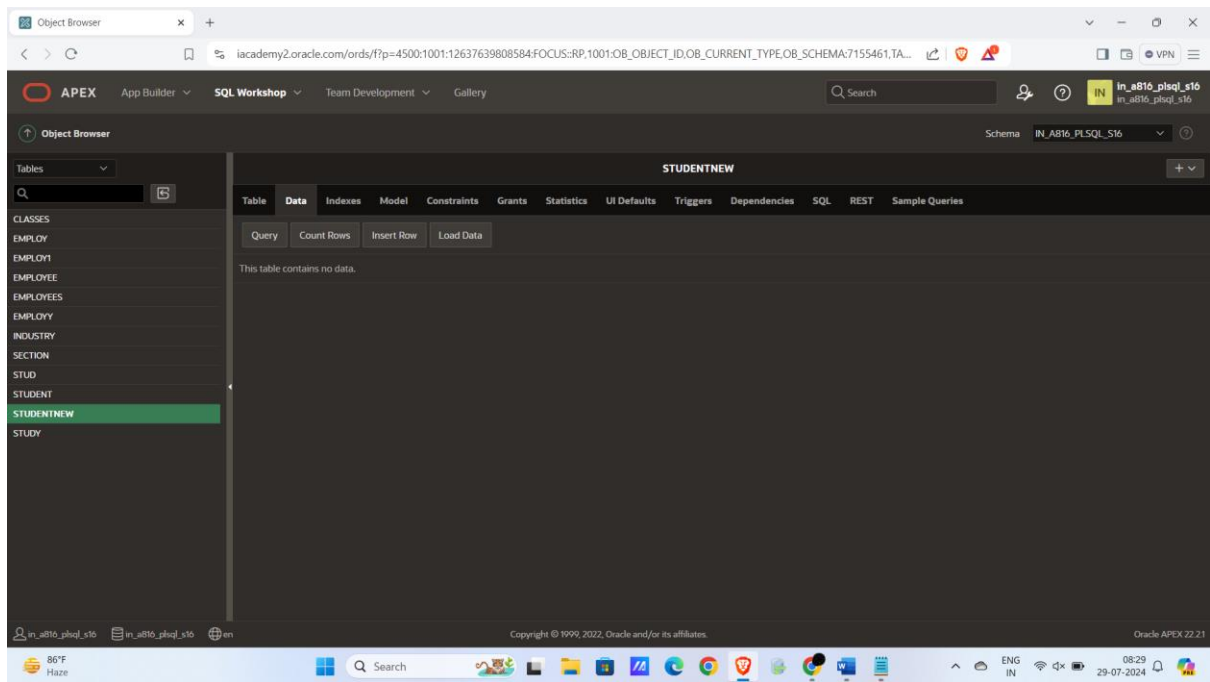
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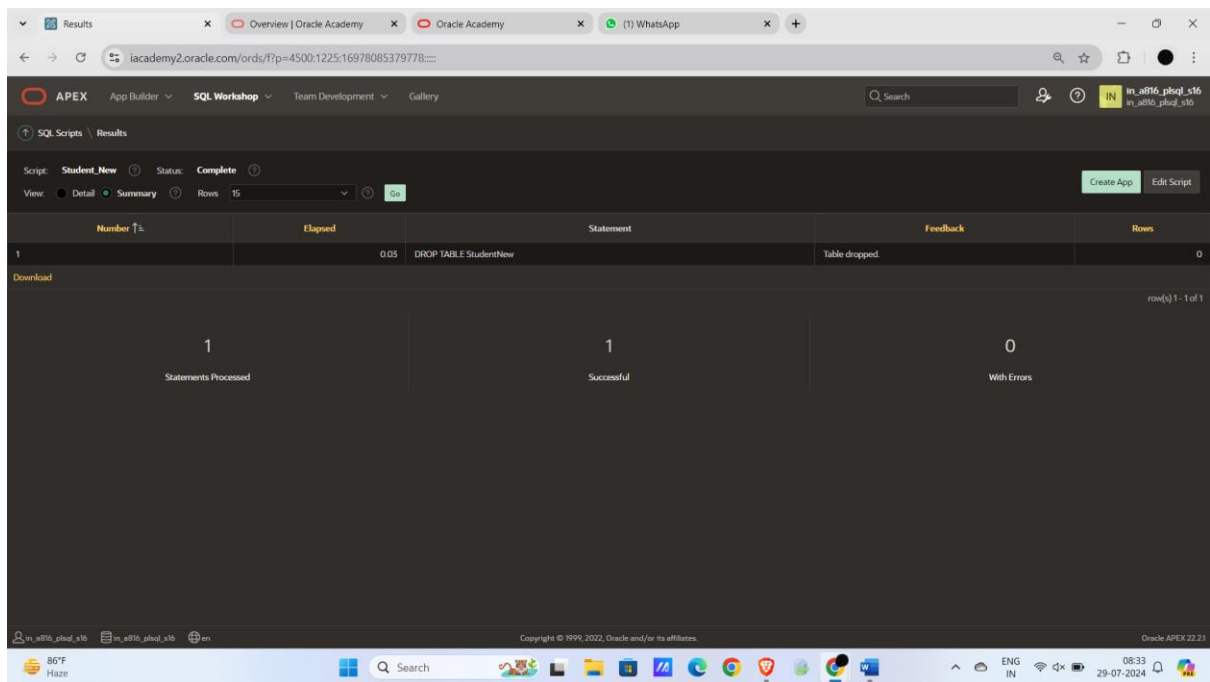
Search

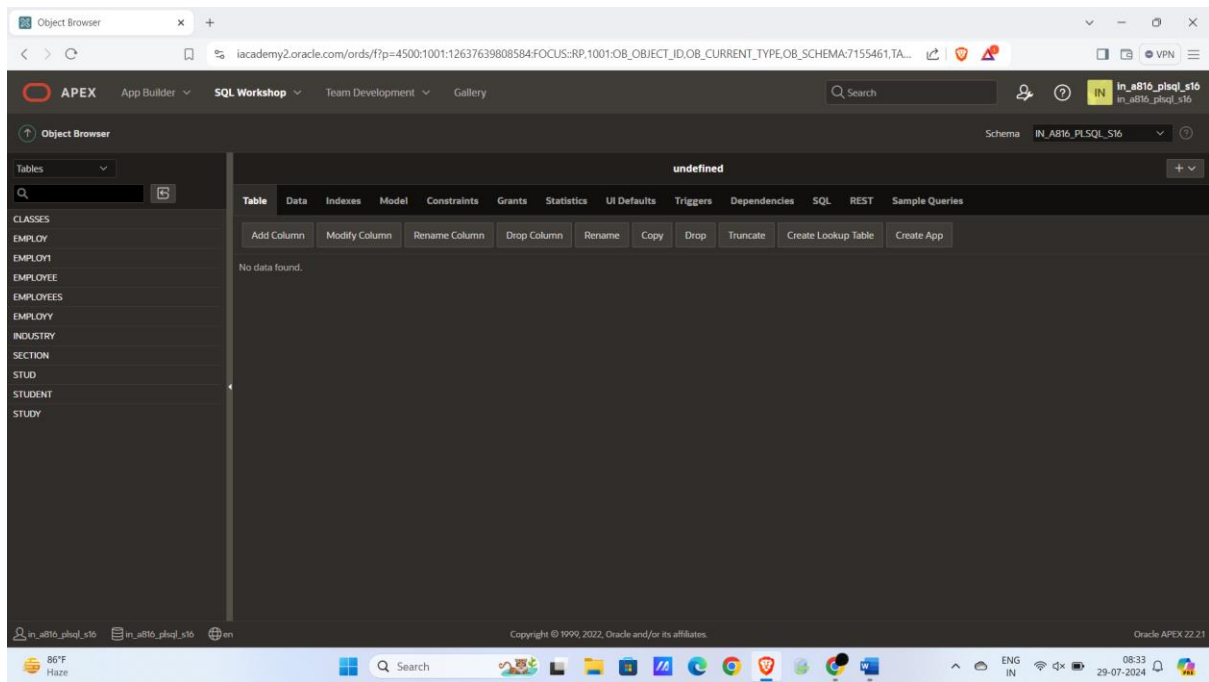
ENG IN

08:29 29-07-2024

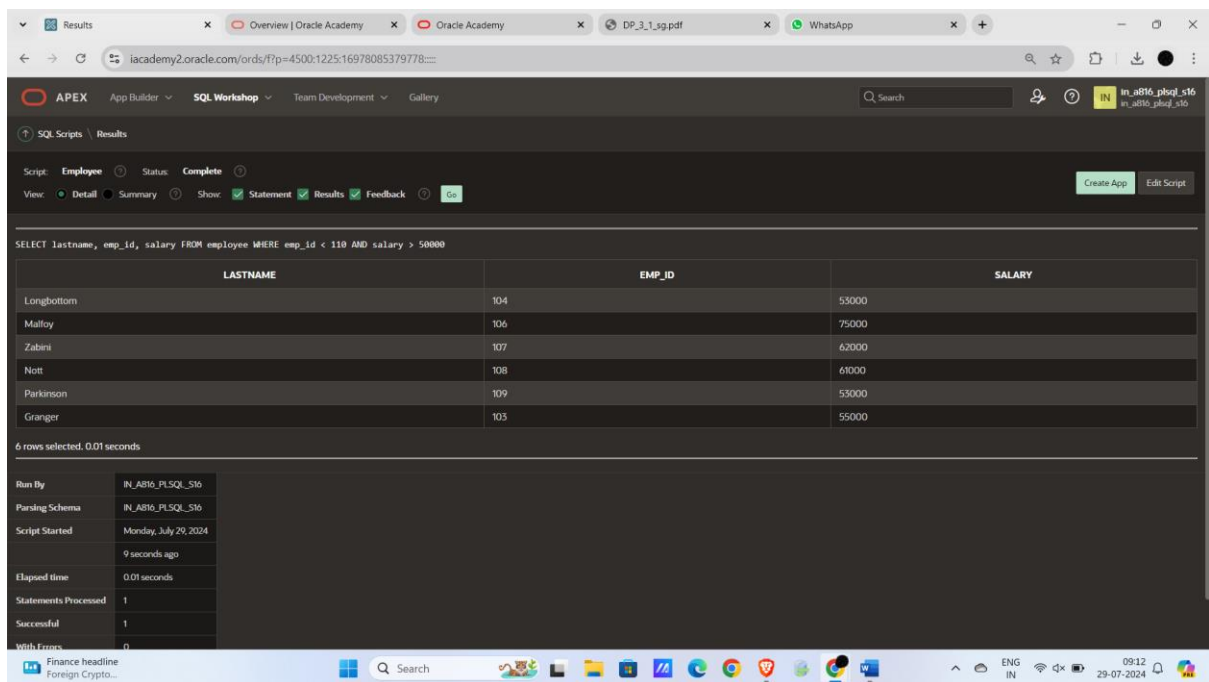


DROP TABLE StudentNew;





```
SELECT lastname, emp_id, salary
FROM employee
WHERE emp_id < 110 AND salary > 50000;
```



SELECT lastname, emp_id, salary

FROM employee

WHERE emp_id > 110 OR salary < 40000;

The screenshot shows the Oracle APEX SQL Workshop interface. The query executed is: `SELECT lastname, emp_id, salary FROM employee WHERE emp_id > 110 OR salary < 40000`. The results are displayed in a table with 5 rows. The status is 'Complete' and the execution time is 0.00 seconds.

LASTNAME	EMP_ID	SALARY
Bones	111	40000
Thomas	112	44000
McMillan	113	40000
Chang	114	25000
Flenchy	115	25000

5 rows selected. 0.00 seconds

Run By: IN_AB16_PLSQL_S16
Parsing Schema: IN_AB16_PLSQL_S16
Script Started: Monday, July 29, 2024
8 seconds ago
Elapsed time: 0.01 seconds
Statements Processed: 1
Successful: 1
With Errors: 0

SELECT lastname

FROM employee

WHERE emp_id NOT IN (105,106,107,108,109);

The screenshot shows the Oracle APEX SQL Workshop interface. The query executed is: `SELECT lastname FROM employee WHERE emp_id NOT IN (105,106,107,108,109)`. The results are displayed in a table with 10 rows. The status is 'Complete' and the execution time is 0.01 seconds.

LASTNAME
Longbottom
Abbot
Bones
Thomas
McMillan
Chang
Flenchy
Potter
Weasley
Granger

10 rows selected. 0.01 seconds

Run By: IN_AB16_PLSQL_S16
Parsing Schema: IN_AB16_PLSQL_S16
Script Started: Monday, July 29, 2024
10 seconds ago
Elapsed time: 0.01 seconds

```
SELECT firstname  
  
FROM employee  
  
WHERE firstname LIKE '%_o%';
```

The screenshot shows the Oracle APEX SQL Workshop interface. The query executed is `SELECT firstname FROM employee WHERE firstname LIKE '%_o%';`. The results are displayed in a table with the column header **FIRSTNAME**. The table contains five rows: Draco, Theodore, Cho, Ron, and Hermione. Below the table, it indicates "5 rows selected, 0.00 seconds". A metadata section on the left provides details about the execution:

Run By	IN_A816_PLSQL_S16
Parsing Schema	IN_A816_PLSQL_S16
Script Started	Monday, July 29, 2024
	8 seconds ago
Elapsed time	0.00 seconds
Statements Processed	1
Successful	1
With Errors	0

The bottom of the screen shows the Windows taskbar with the date 29-07-2024 and time 09:35.

```
SELECT firstname || lastname  
  
FROM employee;
```

The screenshot shows the Oracle SQL Developer interface. The query executed is `SELECT firstname || lastname FROM employee`. The results are displayed in a table with a single column header `FIRSTNAME||LASTNAME`. The data is sorted alphabetically by the concatenated name. The status is 'Complete' and the execution time is 0.01 seconds.

FIRSTNAME LASTNAME
Neville Longbottom
Luna Lovegood
Draco Malfoy
Blaise Zabini
Theodore Nott
Pansy Parkinson
Hannah Abbot
Susan Bones
Dean Thomas
Ernie McMillan
Cho Chang
Justin Flench
Harry Potter
Ron Weasley
Hermione Granger

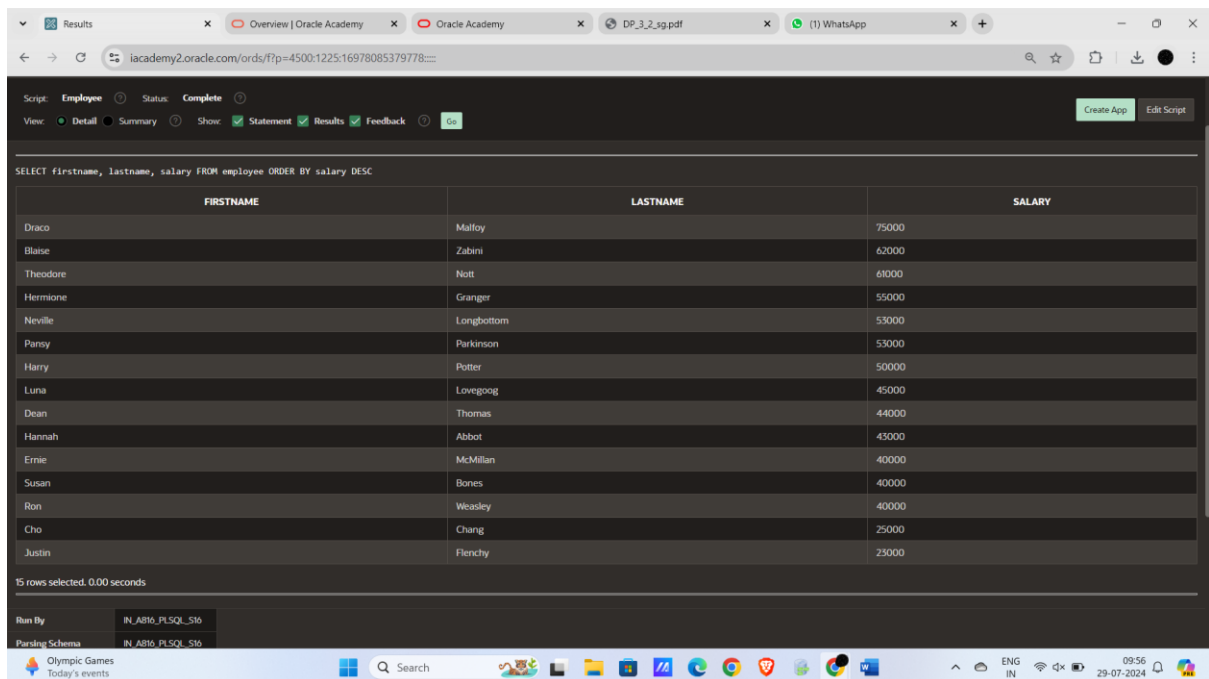
```
SELECT firstname, lastname
FROM employee
ORDER BY salary;
```

The screenshot shows the Oracle SQL Developer interface. The query executed is `SELECT firstname, lastname FROM employee ORDER BY salary`. The results are displayed in a table with two columns: `FIRSTNAME` and `LASTNAME`. The data is sorted by salary in descending order. The status is 'Complete' and the execution time is 0.01 seconds.

FIRSTNAME	LASTNAME
Justin	Flench
Cho	Chang
Susan	Bones
Ron	Weasley
Ernie	McMillan
Hannah	Abbot
Dean	Thomas
Luna	Lovegood
Harry	Potter
Pansy	Parkinson
Neville	Longbottom
Hermione	Granger
Theodore	Nott
Blaise	Zabini
Draco	Malfoy

```
SELECT firstname, lastname, salary
FROM employee
```

ORDER BY salary DESC;



The screenshot shows the Oracle APEX SQL Workshop interface. The query executed is `SELECT firstname, lastname, salary FROM employee ORDER BY salary DESC`. The results are displayed in a table with 15 rows. The columns are FIRSTNAME, LASTNAME, and SALARY. The results are ordered by salary in descending order.

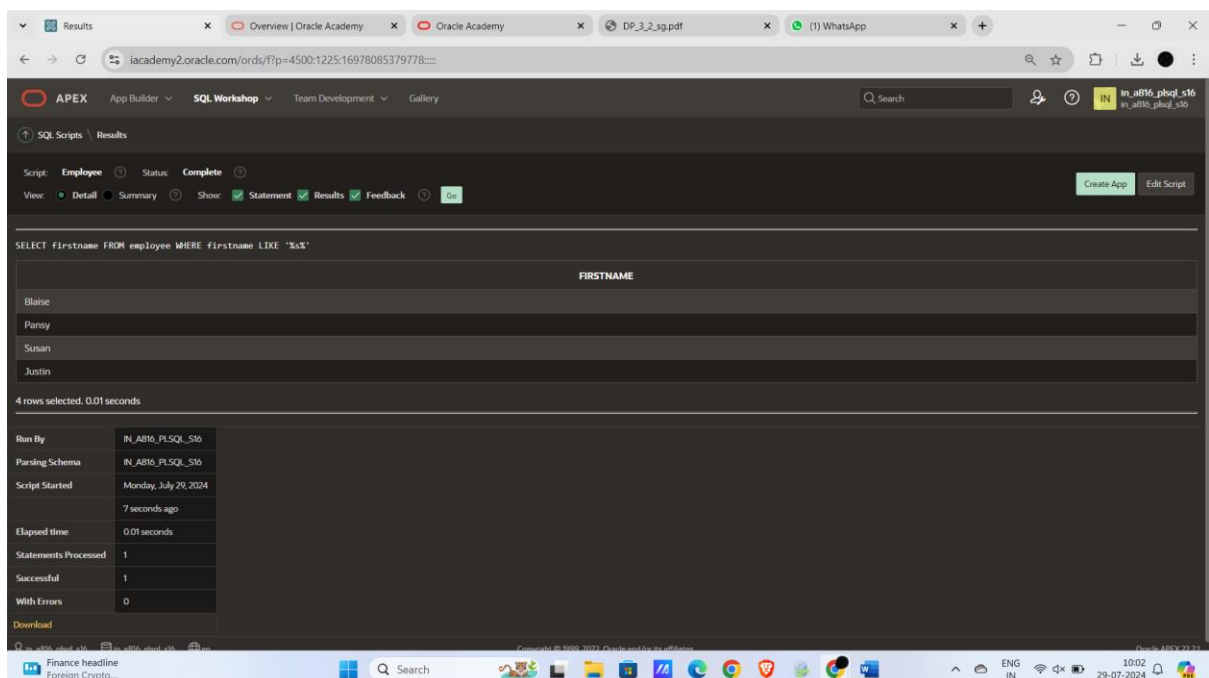
FIRSTNAME	LASTNAME	SALARY
Draco	Malfoy	75000
Blaise	Zabini	62000
Theodore	Nott	61000
Hermione	Granger	55000
Neville	Longbottom	53000
Pansy	Parkinson	53000
Harry	Potter	50000
Luna	Lovegood	45000
Dean	Thomas	44000
Hannah	Abbot	43000
Ernie	McMillan	40000
Susan	Bones	40000
Ron	Weasley	40000
Cho	Chang	25000
Justin	Fletcher	23000

15 rows selected. 0.00 seconds

SELECT firstname

FROM employee

WHERE firstname LIKE '%s%';



The screenshot shows the Oracle APEX SQL Workshop interface. The query executed is `SELECT firstname FROM employee WHERE firstname LIKE 's%'`. The results are displayed in a table with 4 rows. The column is FIRSTNAME. The results are filtered by the condition `firstname LIKE 's%'`.

FIRSTNAME
Blaise
Pansy
Susan
Justin

4 rows selected. 0.01 seconds

Run By: IN_A816_PLSQL_S16
Parsing Schema: IN_A816_PLSQL_S16
Script Started: Monday, July 29, 2024
7 seconds ago
Elapsed time: 0.01 seconds
Statements Processed: 1
Successful: 1
With Errors: 0

SELECT firstname || ' ' || lastname

AS Names

FROM employee;

The screenshot shows the Oracle APEX SQL Workshop interface. The script being executed is `SELECT first_name || ' ' || last_name AS Names FROM employee`. The status is 'Complete'. The results are displayed in a table with the column header 'NAMES'. The table contains 15 rows of employee names. The bottom status bar indicates '15 rows selected, 0.01 seconds'.

NAMES
Neville Longbottom
Luna Lovegood
Draco Malfoy
Blaise Zabini
Theodore Nott
Pansy Parkinson
Hannah Abbott
Susan Bones
Dean Thomas
Ernie MacMillan
Cho Chang
Justin Finch-Fletchley
Harry Potter
Ron Weasley
Hermione Granger

SELECT first_name

FROM employee

WHERE first_name LIKE 'R%';

The screenshot shows the Oracle APEX SQL Workshop interface. The script being executed is `SELECT first_name FROM employee WHERE first_name LIKE 'R%'`. The status is 'Complete'. The results are displayed in a table with the column header 'FIRSTNAME'. The table contains one row with the value 'Ron'. The bottom status bar indicates 'Statement processed, 0.01 seconds'.

FIRSTNAME
Ron

Below the results table, a metadata section provides details about the execution:

Run By	IN_A816_PLSQL_S16
Parsing Schema	IN_A816_PLSQL_S16
Script Started	Monday, July 29, 2024
Elapsed time	7 seconds ago
Elapsed time	0.01 seconds
Statements Processed	1
Successful	1
With Errors	0

Script: **Employee** Status: **Complete**

View: **Detail** Summary Show ☒ Statement ☒ Results ☒ Feedback ☐

```
SELECT SUBSTR(lastname,1,3) FROM employee
```

SUBSTR(LASTNAME,1,3)
Lon
Lov
Mal
Zab
Not
Par
Abb
Bon
Tho
McM
Cha
File
Pot
Wea
Gra

15 rows selected. 0.01 seconds

```
SELECT firstname, INSTR(firstname,'a')
FROM employee;
```

Script: **Employee** Status: **Complete**

View: **Detail** Summary Show ☒ Statement ☒ Results ☒ Feedback ☐

```
SELECT firstname, INSTR(firstname,'a') FROM employee
```

FIRSTNAME	INSTR(FIRSTNAME,'A')
Neville	0
Luna	4
Draco	3
Blaise	3
Theodore	0
Pansy	2
Hannah	2
Susan	4
Dean	3
Ernie	0
Cho	0
Justin	0
Harry	2
Ron	0
Hermione	0

15 rows selected. 0.00 seconds

```
CREATE TABLE Person(personID integer PRIMARY KEY,
    personName varchar(40),
    email varchar(50),
    phoneNumber numeric);

CREATE TABLE Orders(orderID integer PRIMARY KEY,
    personID integer NOT NULL,
```

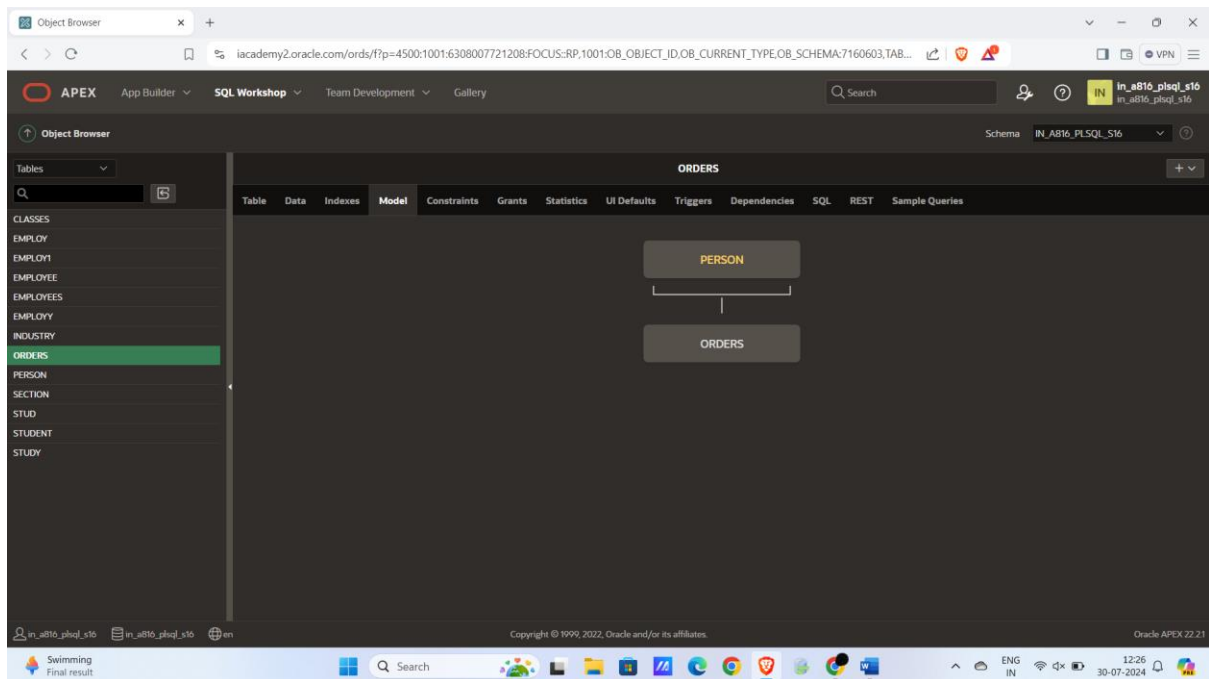


```
orderAmount integer);
```

FOREIGN KEY:

ALTER TABLE Orders

ADD FOREIGN KEY(personID) REFERENCES Person(personID);



SELECT *

FROM Orders

JOIN Person

ON Orders.personID = Person.personID;

SELECT * FROM Orders JOIN Person ON Orders.personID = Person.personID

ORDERID	PERSONID	ORDERAMOUNT	PERSONID	PERSONNAME	EMAIL	PHONENUMBER
100	1001	50000	1001	Harry	harry@gmail.com	12345
101	1003	75000	1003	Hermione	hermione@gmail.com	14325
102	1002	90000	1002	Draco	draco@gmail.com	15245

3 rows selected. 0.02 seconds

Run By	IN_A816_PLSQL_S16
Parsing Schema	IN_A816_PLSQL_S16
Script Started	Tuesday, July 30, 2024
	2 minutes ago
Elapsed time	0.02 seconds
Statements Processed	1
Successful	1
With Errors	0

```
CREATE TABLE Employee123(emp_id integer,
```

```
    firstName varchar(35),
```

```
    lastName varchar(35),
```

```
    dept_id integer);
```

```
INSERT INTO Employee123 VALUES(1001,'Harry','Styles',90);
```

```
INSERT INTO Employee123 VALUES(1002,'Taylor','Swift',90);
```

```
INSERT INTO Employee123 VALUES(1003,'Olivia','Rodrigo',80);
```

```
INSERT INTO Employee123 VALUES(1004,'Sabrina','Carpenter',80);
```

```
INSERT INTO Employee123 VALUES(1005,'Shawn','Mendes',60);
```

```
INSERT INTO Employee123 VALUES(1006,'Camilla','Cabello',70);
```

```
INSERT INTO Employee123 VALUES(1007,'Megan','Trainor',50);
```

```
INSERT INTO Employee123 VALUES(1008,'Ariana','Grande',60);
```

```
INSERT INTO Employee123 VALUES(1009,'Billie','Eilish',70);
```

```
INSERT INTO Employee123 VALUES(1010,'Paris','Paloma',80);
```

```
INSERT INTO Employee123 VALUES(1011,'Beyonce','Knowles',90);
```

```
INSERT INTO Employee123 VALUES(1012,'Madison','Beer',40);
```

EDIT	EMP_ID	FIRSTNAME	LASTNAME	DEPT_ID
	1001	Harry	Styles	90
	1002	Taylor	Swift	90
	1003	Olivia	Rodrigo	80
	1004	Sabrina	Carpenter	80
	1005	Shawn	Mendes	60
	1006	Camilla	Cabello	70
	1007	Megan	Trainor	50
	1008	Ariana	Grande	60
	1009	Billie	Eilish	70
	1010	Paris	Paloma	80
	1011	Beyonce	Knowles	90
	1012	Madison	Beer	40

```

SELECT lastName,
CASE dept_id
  WHEN 90 THEN 'Management'
  WHEN 80 THEN 'Sales'
  WHEN 60 THEN 'IT'
  ELSE 'Other Department'
END AS Department
FROM Employee123;

```

WhatsApp Overview | Oracle Academy Oracle Academy DP_5_3_xg.pdf Results

lacademy2.oracle.com/ords/f?p=4500:1225:2567214156868:::

APEX App Builder SQL Workshop Team Development Gallery

Script: case test Status: Complete

View: Detail Summary Show: Statement Results Feedback

Create App Edit Script

```
SELECT lastName, CASE dept_id WHEN 90 THEN 'Management' WHEN 80 THEN 'Sales' WHEN 60 THEN 'IT' ELSE 'Other Department' END AS Department FROM Employee123
```

LASTNAME	DEPARTMENT
Styles	Management
Swift	Management
Rodrigo	Sales
Carpenter	Sales
Mendes	IT
Cabello	Other Department
Trainor	Other Department
Grande	IT
Elish	Other Department
Paloma	Sales
Knowles	Management
Beer	Other Department

12 rows selected. 0.00 seconds

Run By: IN_AB16_PLSQL_S16

Parsing Schema: IN_AB16_PLSQL_S16

News for you His son died by...

Search

ENG IN 08:42 31-07-2024

```
SELECT lastName,  
DECODE(dept_id,  
90, 'Management',  
80, 'Sales',  
60, 'It',  
'Other department')  
AS "Department"  
FROM Employee123;
```

WhatsApp Overview | Oracle Academy Oracle Academy DP_5_3.jpg Results

lacademy2.oracle.com/ords/f?p=4500:1225:2567214156868:::

APEX App Builder SQL Workshop Team Development Gallery

SQL Scripts Results

Script: case test Status: Complete

View: Detail Summary Show: Statement Results Feedback Go Create App Edit Script

SELECT lastName, DECODE(dept_id, 90, 'Management', 80, 'Sales', 60, 'It', 'Other department') AS "Department" FROM Employee123

LASTNAME	Department
Styles	Management
Swift	Management
Rodrigo	Sales
Carpenter	Sales
Mendes	It
Cabello	Other department
Trainor	Other department
Grande	It
Elish	Other department
Paloma	Sales
Knowles	Management
Beer	Other department

12 rows selected. 0.01 seconds

Run By: IN_AB16_PLSQL_S16

Parsing Schema: IN_AB16_PLSQL_S16

86°F Haze

SELECT personID, personName, email, phoneNumber

FROM Person NATURAL JOIN

Orders;

Results

lacademy2.oracle.com/ords/f?p=4500:1225:2567214156868:::

APEX App Builder SQL Workshop Team Development Gallery

SQL Scripts Results

Script: case test Status: Complete

View: Detail Summary Show: Statement Results Feedback Go Create App Edit Script

SELECT personID, personName, email, phoneNumber FROM Person NATURAL JOIN Orders

PERSONID	PERSONNAME	EMAIL	PHONENUMBER
1001	Harry	harry@gmail.com	12345
1003	Hermione	hermione@gmail.com	14325
1002	Draco	draco@gmail.com	13245

3 rows selected. 0.01 seconds

Run By: IN_AB16_PLSQL_S16

Parsing Schema: IN_AB16_PLSQL_S16

Script Started: Wednesday, July 31, 2024

Elapsed time: 7 seconds ago

Elapsed time: 0.01 seconds

Statements Processed: 1

Successful: 1

With Errors: 0

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86°F Haze

SELECT personID, personName

FROM Person NATURAL JOIN

Orders;

Script: case test Status: Complete
View: Detail Summary Show: Statement Results Feedback
Go Create App Edit Script

SELECT p.personID, p.personName FROM Person p CROSS JOIN Orders o

PERSONID	PERSONNAME
1005	Ginny
1005	Ginny
1005	Ginny
1001	Harry
1001	Harry
1001	Harry
1002	Draco
1002	Draco
1002	Draco
1003	Hermione
1003	Hermione
1003	Hermione
1004	Ron
1004	Ron
1004	Ron

15 rows selected. 0.00 seconds

```
SELECT p.personID, p.personName, o.orderID
FROM Person p
CROSS JOIN Orders o;
```

Script: case test Status: Complete
View: Detail Summary Show: Statement Results Feedback
Go Create App Edit Script

SELECT p.personID, p.personName, o.orderID FROM Person p CROSS JOIN Orders o

PERSONID	PERSONNAME	ORDERID
1005	Ginny	100
1005	Ginny	101
1005	Ginny	102
1001	Harry	100
1001	Harry	101
1001	Harry	102
1002	Draco	100
1002	Draco	101
1002	Draco	102
1003	Hermione	100
1003	Hermione	101
1003	Hermione	102
1004	Ron	100
1004	Ron	101
1004	Ron	102

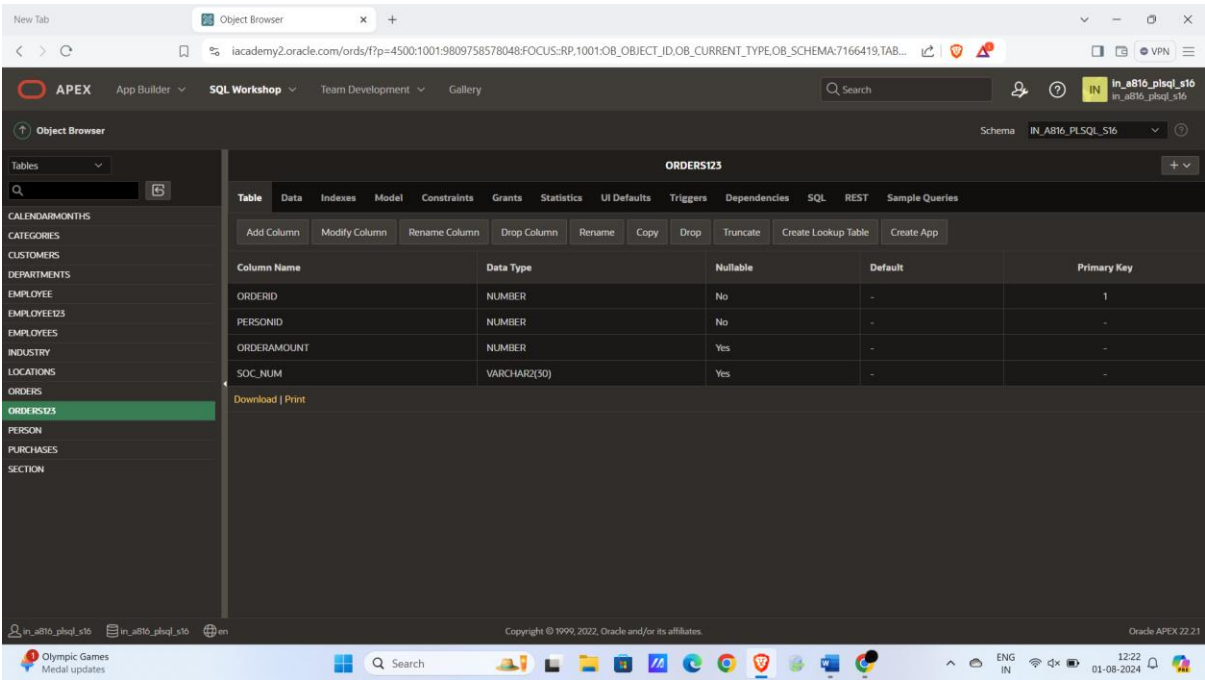
15 rows selected. 0.01 seconds

Run By: IN_A80_PL5QL_518

```
ALTER TABLE Person
ADD Soc_num char(30);
```

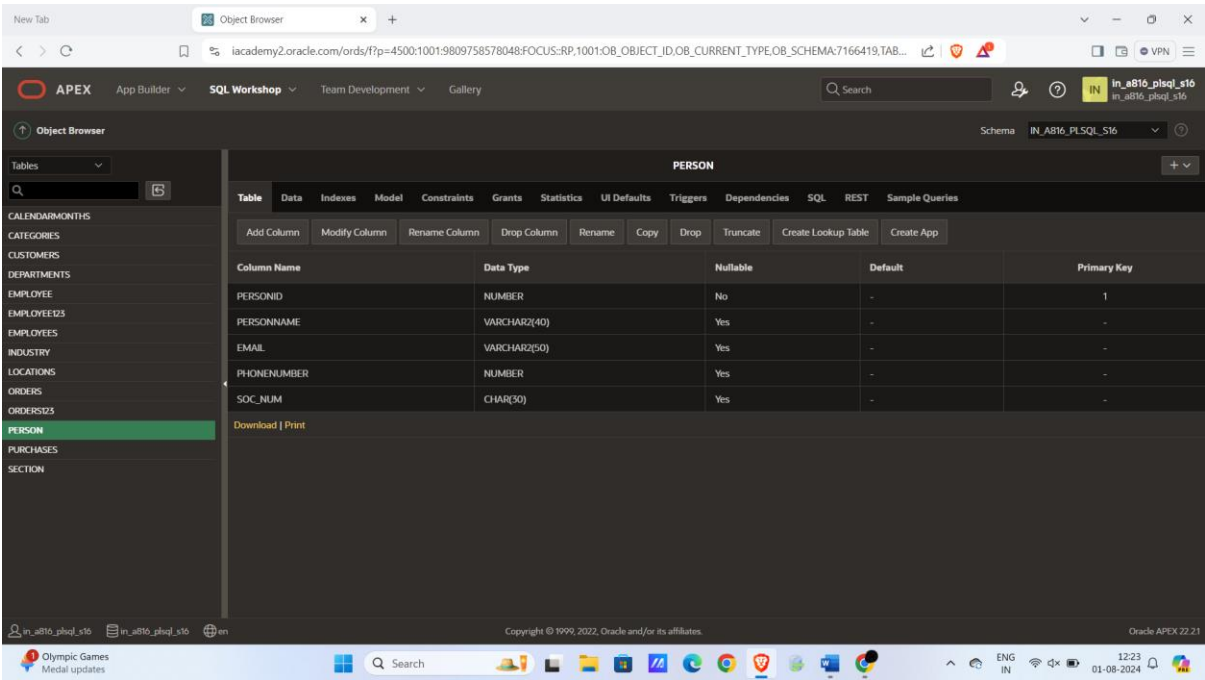
```
ALTER TABLE Orders123
```

ADD Soc_num varchar(30);



The screenshot shows the Oracle APEX Object Browser interface. The left sidebar lists various database objects, with 'ORDERS123' selected under the 'ORDERS' category. The main panel displays the table structure for 'ORDERS123' in the 'IN_A816_PLSQL_S16' schema. The table has five columns: ORDERID (NUMBER, Primary Key), PERSONID (NUMBER), ORDERAMOUNT (NUMBER), SOC_NUM (VARCHAR2(30)), and a Primary Key constraint on ORDERID.

Column Name	Data Type	Nullable	Default	Primary Key
ORDERID	NUMBER	No	-	1
PERSONID	NUMBER	No	-	-
ORDERAMOUNT	NUMBER	Yes	-	-
SOC_NUM	VARCHAR2(30)	Yes	-	-



The screenshot shows the Oracle APEX Object Browser interface. The left sidebar lists various database objects, with 'PERSON' selected under the 'PERSONS' category. The main panel displays the table structure for 'PERSON' in the 'IN_A816_PLSQL_S16' schema. The table has six columns: PERSONID (NUMBER, Primary Key), PERSONNAME (VARCHAR2(40)), EMAIL (VARCHAR2(50)), PHONENUMBER (NUMBER), SOC_NUM (CHAR(30)), and a Primary Key constraint on PERSONID.

Column Name	Data Type	Nullable	Default	Primary Key
PERSONID	NUMBER	No	-	1
PERSONNAME	VARCHAR2(40)	Yes	-	-
EMAIL	VARCHAR2(50)	Yes	-	-
PHONENUMBER	NUMBER	Yes	-	-
SOC_NUM	CHAR(30)	Yes	-	-

```
SELECT Orders123.OrderID, Person.PersonID, Person.PersonName, Person.PhoneNumber,
Person.Soc_num
FROM Orders123 JOIN Person ON Orders123.Soc_num = Person.Soc_num;
```

```

SELECT personID, personName, email
FROM Person
JOIN Orders123
USING (personID);

```

Results Explain Describe Saved SQL History		
PERSONID	PERSONNAME	EMAIL
1001	Harry	harry@gmail.com
1003	Hermione	hermione@gmail.com
1002	Draco	draco@gmail.com
3 rows returned in 0.00 seconds Download		

```

CREATE TABLE Person(personName varchar(25),
                      deptID varchar(20));
CREATE TABLE Department(deptID numeric,
                          orderNo numeric);

```

```

INSERT INTO person VALUES('Liam','101');
INSERT INTO person VALUES('Chris','102');
INSERT INTO person VALUES('Nick','103');

```

```

INSERT INTO Department VALUES(101,12345);
INSERT INTO Department VALUES(102,67891);

```


PERSON

+ ▾

Table

Data

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Statistics

Add Column

Modify Column

Rename Column

Drop Column

Rename

Copy

Drop

Truncate

Create Lookup Table

Create App

Column Name	Data Type	Nullable	Default	Primary Key
PERSONNAME	VARCHAR2(25)	Yes	-	-
DEPTID	VARCHAR2(20)	Yes	-	-

Download | Print

DEPARTMENT

+ ▾

Table

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Grants

Statistics

Add Column

Modify Column

Rename Column

Drop Column

Rename

Copy

Drop

Truncate

Create Lookup Table

Create App

Column Name	Data Type	Nullable	Default	Primary Key
DEPTID	NUMBER	Yes	-	-
ORDERNO	NUMBER	Yes	-	-

Download | Print

```
SELECT personName, deptID
FROM Person JOIN Department USING (deptID);
```

SELECT personName, deptID FROM Person JOIN Department USING (deptID)	
PERSONNAME	DEPTID
Liam	101
Chris	102
2 rows selected. 0.01 seconds	

```
CREATE TABLE Locate(deptID numeric,
    Loca_name varchar(30));
```

```
INSERT INTO Locate VALUES(101,'Newyork');
```

```
INSERT INTO Locate VALUES(102,'London');
```

LOCATE				
Table	Data	Indexes	Model	Constraints
<div><div>Add Column</div><div>Modify Column</div><div>Rename Column</div><div>Drop Column</div><div>Rename</div><div>Copy</div><div>Drop</div><div>Truncate</div><div>Create Lookup Table</div><div>Create App</div></div>				
Column Name	Data Type	Nullable	Default	Primary Key
DEPTID	NUMBER	Yes	-	-
LOCA_NAME	VARCHAR2(30)	Yes	-	-
Download Print				

```
SELECT personName, deptID AS "Department", Locate.Loca_name
FROM Person JOIN Department USING (deptID)
JOIN Locate USING (deptID);
```

```
SELECT personName, deptId AS "Department", Locate.Loca_name FROM Person JOIN Department USING (deptID) JOIN
Locate USING (deptID)
```

PERSONNAME	Department	LOCA_NAME
Liam	101	Newyork
Chris	102	London

2 rows selected. 0.01 seconds

```
ALTER TABLE Person
ADD LastName varchar(30);
```

```
ALTER TABLE Department
ADD deptName varchar(30);
```

PERSON

+ ▼

Table

Data

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Model

Constraints

Grants




Statistics

Query

Count Rows

Insert Row

Load Data

EDIT	PERSONNAME	DEPTID	LASTNAME
	Liam	101	Hemsworrth
	Chris	102	Hemsworth
	Nick	103	Jonas

Download

```
UPDATE Person SET LastName = 'Hemsworth' WHERE personName='Chris';
UPDATE Person SET LastName = 'Hemsworrth' WHERE personName='Liam';
UPDATE Person SET LastName = 'Jonas' WHERE personName='Nick';
```

UPDATE Department SET deptName = 'sales' WHERE deptID= 101;

UPDATE Department SET deptName = 'management' WHERE deptId= 102;

```
SELECT p.LastName, d.deptID,  
d.deptName  
FROM Person p LEFT OUTER JOIN  
department d  
ON (p.deptID =  
d.deptID);
```

```
SELECT p.LastName, d.deptID, d.deptName FROM Person p LEFT OUTER JOIN department d ON (p.deptID = d.deptID)
```

LASTNAME	DEPTID	DEPTNAME
Hemsworrth	101	sales
Cage	101	sales
Hemsworth	102	management
Radcliffe	102	management
Hemsworrth	101	sales
Cage	101	sales
Hemsworth	102	management
Radcliffe	102	management
Jonas	103	HR
Pattinson	103	HR
Hemsworth	102	management
Radcliffe	102	management
Riddle	-	-
Grint	-	-

14 rows selected. 0.01 seconds

```

SELECT p.LastName, d.deptID,
d.deptName
FROM Person p RIGHT OUTER JOIN
department d
ON (p.deptID =
d.deptID);

```

SELECT p.LastName, d.deptID, d.deptName FROM Person p RIGHT OUTER JOIN department d ON (p.deptID = d.deptID)		
LASTNAME	DEPTID	DEPTNAME
Hemsworrth	101	sales
Hemsworrth	101	sales
Hemsworth	102	management
Hemsworth	102	management
Hemsworth	102	management
Jonas	103	HR
Cage	101	sales
Cage	101	sales
Pattinson	103	HR
Radcliffe	102	management
Radcliffe	102	management
Radcliffe	102	management

12 rows selected. 0.01 seconds

```

SELECT p.LastName, d.deptID,
d.deptName
FROM Person p FULL OUTER JOIN
department d
ON (p.deptID =
d.deptID);

```

```
SELECT p.LastName, d.deptID, d.deptName FROM Person p FULL OUTER JOIN department d ON (p.deptID = d.deptID)
```

LASTNAME	DEPTID	DEPTNAME
Hemsworrrth	101	sales
Hemsworrrth	101	sales
Hemsworth	102	management
Hemsworth	102	management
Hemsworth	102	management
Jonas	103	HR
Cage	101	sales
Cage	101	sales
Pattinson	103	HR
Radcliffe	102	management
Radcliffe	102	management
Radcliffe	102	management
Grint	-	-
Riddle	-	-

14 rows selected. 0.01 seconds

```
SELECT p.LastName || ' works in ' || d.deptName
```

```
AS "Works "
```

```
FROM Person p JOIN Department d
```

```
ON (p.deptID = d.deptID);
```

```
SELECT p.LastName || ' works in ' || d.deptName AS "Works " FROM Person p JOIN Department d ON (p.deptID = d.deptID)
```

Works
Hemsworrrth works in sales
Hemsworrrth works in sales
Hemsworth works in management
Hemsworth works in management
Hemsworth works in management
Jonas works in HR
Cage works in sales
Cage works in sales
Pattinson works in HR
Radcliffe works in management
Radcliffe works in management
Radcliffe works in management

12 rows selected. 0.00 seconds