

Name Haris

Roll # 23P-0573

(1)

SELECT * FROM EMPLOYEES WHERE FIRST_NAME LIKE '%A%' OR LAST_NAME LIKE '%A';

```
--23p-0573
SELECT * FROM EMPLOYEES WHERE FIRST_NAME LIKE '%A%' OR LAST_NAME LIKE '%A';
```

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT
1	103 Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	(null)	102	
2	115 Alexander	Khoo	AKHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	114	
3	121 Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	100	
4	147 Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	100	

SELECT * FROM EMPLOYEES WHERE LAST_NAME LIKE '%e_';

```
--23p-0573
SELECT * FROM EMPLOYEES WHERE LAST_NAME LIKE '%e_';
```

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT
1	109 Daniel	Faviet	DFAVIET	515.124.4169	16-AUG-02	FI_ACCOUNT	9000	(null)	108	
2	110 John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108	
3	119 Karen	Colmenares	KCOLMENAS	515.127.4566	10-AUG-07	PU_CLERK	2500	(null)	114	

SELECT * FROM EMPLOYEES WHERE FIRST_NAME LIKE '_l%';

```
--23p-0573
SELECT * FROM EMPLOYEES WHERE FIRST_NAME LIKE '_l%';
```

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID
1	103 Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	(null)	102
2	115 Alexander	Khoo	AKHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	114

SELECT * FROM EMPLOYEES WHERE FIRST_NAME LIKE '_l%' AND FIRST_NAME LIKE '___n%';

```
--23p-0573
SELECT * FROM EMPLOYEES WHERE FIRST_NAME LIKE '_l%' AND FIRST_NAME LIKE '___n%';
```

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT
1	149 Eleni	Zlotkey	EZLOTKEY	011.44.1344.429018	29-JAN-08	SA_MAN	10500	0.2	100	
2	196 Alana	Walsh	AWALSH	650.507.9811	24-APR-06	SH_CLERK	3100	(null)	124	

(2)

create user P230573_Lab03 identified by abc123;

grant All PRIVILEGES to P230559_Lab03;

```
--23P-0573
create user P230573_Lab03 identified by abc123;
grant All PRIVILEGES to P230573_Lab03;
```

Script Output x

Task completed in 0.032 seconds

User P230573_LAB03 created.

Grant succeeded.

(3) create table Employees(

Employee_id INT,

Full_Name VARCHAR(100) ,

Salary INT,

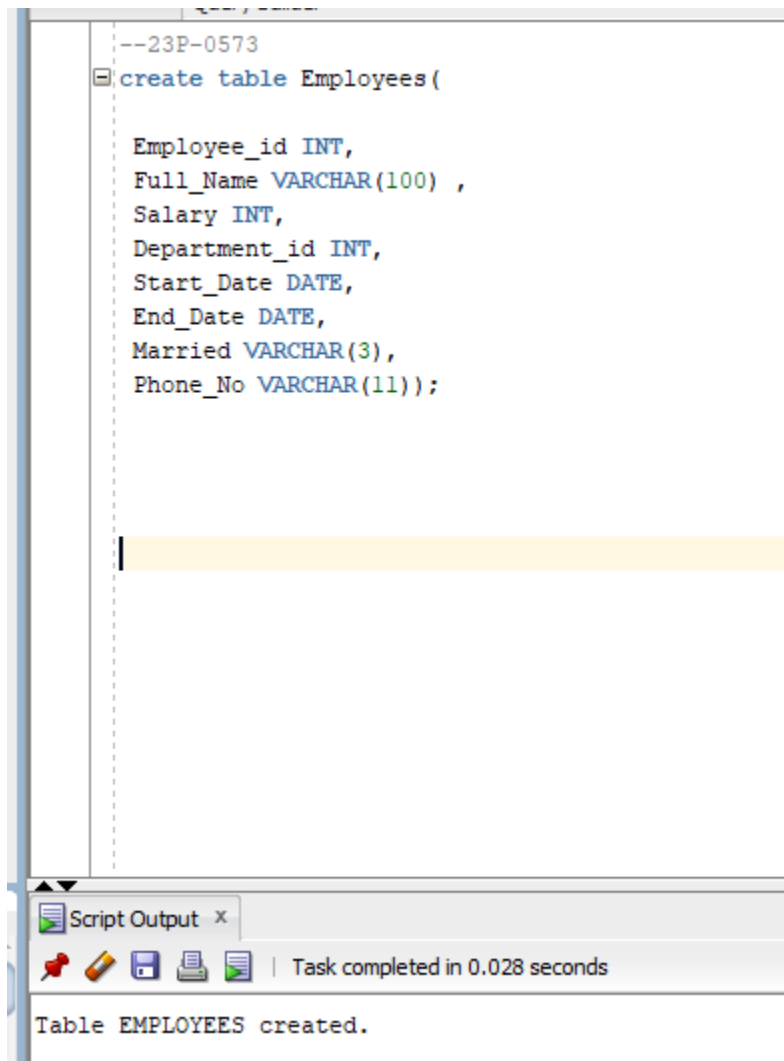
Department_id INT,

Start_Date DATE,

End_Date DATE,

Married VARCHAR(3),

Phone_No VARCHAR(11)



(4) create table Departments(

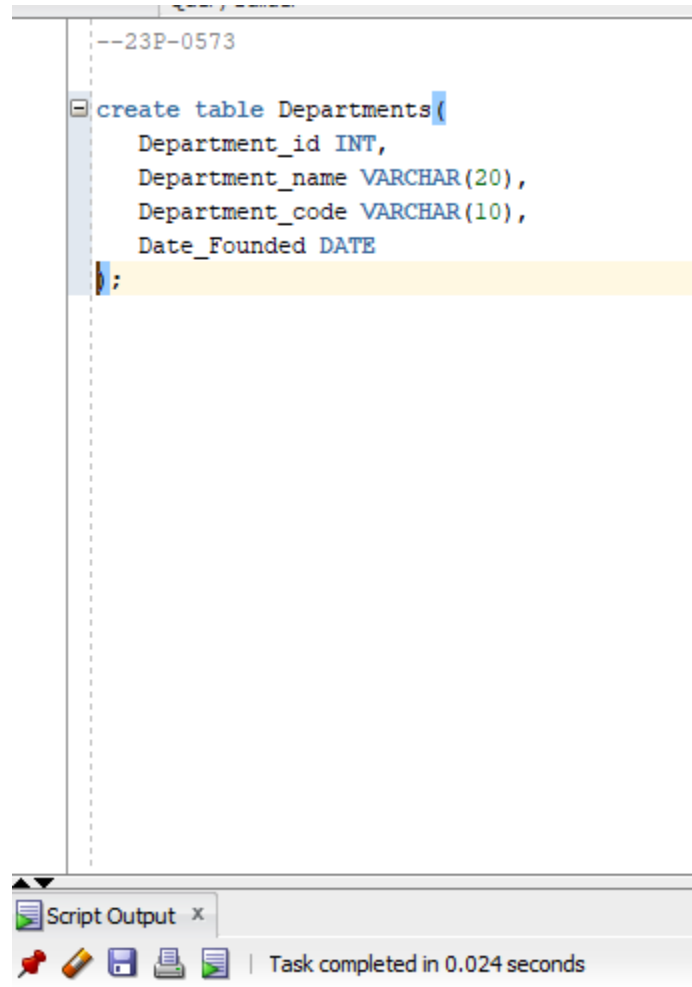
Department_id INT,

Department_name VARCHAR(20),

Department_code VARCHAR(10),

Date_Founded DATE

);



The screenshot shows a SQL IDE window. The main editor contains the following SQL script:

```
--23P-0573  
  
create table Departments(  
    Department_id INT,  
    Department_name VARCHAR(20),  
    Department_code VARCHAR(10),  
    Date_Founded DATE  
);
```

The script is highlighted in yellow. Below the editor is a 'Script Output' window. It contains the message 'Task completed in 0.024 seconds' and a status bar at the bottom that reads 'Table DEPARTMENTS created.'

Table DEPARTMENTS created.

(5) ALTER TABLE DEPARTMENTS ADD CONSTRAINT UNIQUE_DEP_NAME UNIQUE
(DEPARTMENT_NAME);

ALTER TABLE DEPARTMENTS ADD CONSTRAINT CHECK_DATE_FOUNDED CHECK
(DATE_FOUNDED > TO_DATE('2000-01-01', 'YYYY-MM-DD'));

```
--23P-0573

ALTER TABLE DEPARTMENTS
ADD CONSTRAINT UNIQUE_DEP_NAME UNIQUE (DEPARTMENT_NAME);

ALTER TABLE DEPARTMENTS
ADD CONSTRAINT CHECK_DATE_FOUNDED CHECK (DATE_FOUNDED > TO_DATE('2000-01-01', 'YYYY-MM-DD'));

|
```

Script Output x

Task completed in 0.03 seconds

Table DEPARTMENTS altered.

Table DEPARTMENTS altered.

(6) alter table departments ADD CONSTRAINT PRIM_KEY PRIMARY KEY(department_ID);

--23P-0573

```
alter table departments ADD CONSTRAINT PRIM_KEY PRIMARY KEY(department_ID);
```

Script Output x

Task completed in 0.027 seconds

Table DEPARTMENTS altered.

Table DEPARTMENTS altered.

(7) ALTER TABLE EMPLOYEES ADD CONSTRAINT FOREIGN_KEY FOREIGN KEY
(DEPARTMENT_ID) REFERENCES DEPARTMENTS(DEPARTMENT_ID);

```
--23P-0573

ALTER TABLE EMPLOYEES ADD CONSTRAINT FOREIGN_KEY FOREIGN KEY (DEPARTMENT_ID) REFERENCES DEPARTMENTS(DEPARTMENT_ID);
```

Script Output x

Task completed in 0.032 seconds

Table DEPARTMENTS altered.

Table EMPLOYEES altered.

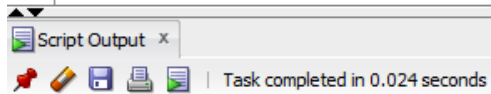
(8) INSERT INTO EMPLOYEES

(EMPLOYEE_ID,DEPARTMENT_ID,FULL_NAME,SALARY,START_DATE,END_DATE,
MARRIED,PHONE_NO) VALUES (5,105,'saleem',78000,TO_DATE('2000-3-1','YYYY-MM-DD'), null,'yes','654654');

--23P-0573

```
INSERT INTO DEPARTMENTS (DEPARTMENT_ID, DEPARTMENT_NAME, DEPARTMENT_CODE, DATE_FOUNDED)
VALUES (105, 'Technical Support', 930, TO_DATE('2001-01-20', 'YYYY-MM-DD'));
```

```
INSERT INTO EMPLOYEES (EMPLOYEE_ID, DEPARTMENT_ID, FULL_NAME, SALARY, START_DATE, END_DATE,
MARRIED, PHONE_NO) VALUES (5, 105, 'saleem', 78000, TO_DATE('2000-3-1', 'YYYY-MM-DD'),
null, 'yes', '654654');
```



1 row inserted.

(9)

ALTER TABLE DEPARTMENTS ADD SPECIALITY VARCHAR(30) DEFAULT 'None';

--23P-0573

```
ALTER TABLE DEPARTMENTS ADD SPECIALITY VARCHAR(30) DEFAULT 'None';
```

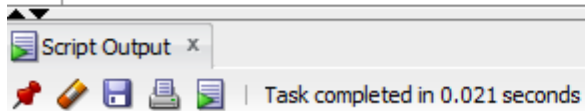


Table DEPARTMENTS altered.

(10)

CREATE table jobs(

job_ID int,

jbo_title varchar(40),

min_salary int,

max_salary int

);

```
--23P-0573

INSERT INTO DEPARTMENTS (DEPARTMENT_ID, DEPARTMENT_NAME, DEPARTMENT_CODE, DATE_FOUNDED)
VALUES (105, 'Technical Support', 930, TO_DATE('2001-01-20', 'YYYY-MM-DD'));

INSERT INTO EMPLOYEES (EMPLOYEE_ID, DEPARTMENT_ID, FULL_NAME, SALARY, START_DATE, END_DATE,
MARRIED, PHONE_NO) VALUES (5, 105, 'saleem', 78000, TO_DATE('2000-3-1', 'YYYY-MM-DD'),
null, 'yes', '654654');

|
```



1 row inserted.

(10)

CREATE table jobs(

job_ID int,

jbo_title varchar(40),

min_salary int,

max_salary int

);

```
--23P-0573

CREATE table jobs(
    job_ID int,
    jbo_title varchar(40),
    min_salary int,
    max_salary int
);
```

Script Output x

Task completed in 0.024 seconds

Table JOBS created.

(11) ALTER TABLE JOBS MODIFY JOB_ID INT NOT NULL, ADD CONSTRAINT JOB_ID_PRI
PRIMARY KEY (JOB_ID);

--23P-0573

```
ALTER TABLE JOBS MODIFY JOB_ID INT NOT NULL, ADD CONSTRAINT JOB_ID_PRI PRIMARY KEY (JOB_ID);
```

(12) ALTER TABLE EMPLOYEES MODIFY EMPLOYEE_ID NOT NULL; ALTER TABLE EMPLOYEES ADD CONSTRAINT Pk_EMP_ID PRIMARY KEY(EMPLOYEE_ID);

ALTER TABLE JOBS ADD EMPLOYEE_ID INT; ALTER TABLE JOBS ADD CONSTRAINT FOREIGN_KEY_IN_JOBS FOREIGN KEY(EMPLOYEE_ID) REFERENCES EMPLOYEES(EMPLOYEE_ID);

--23P-0573

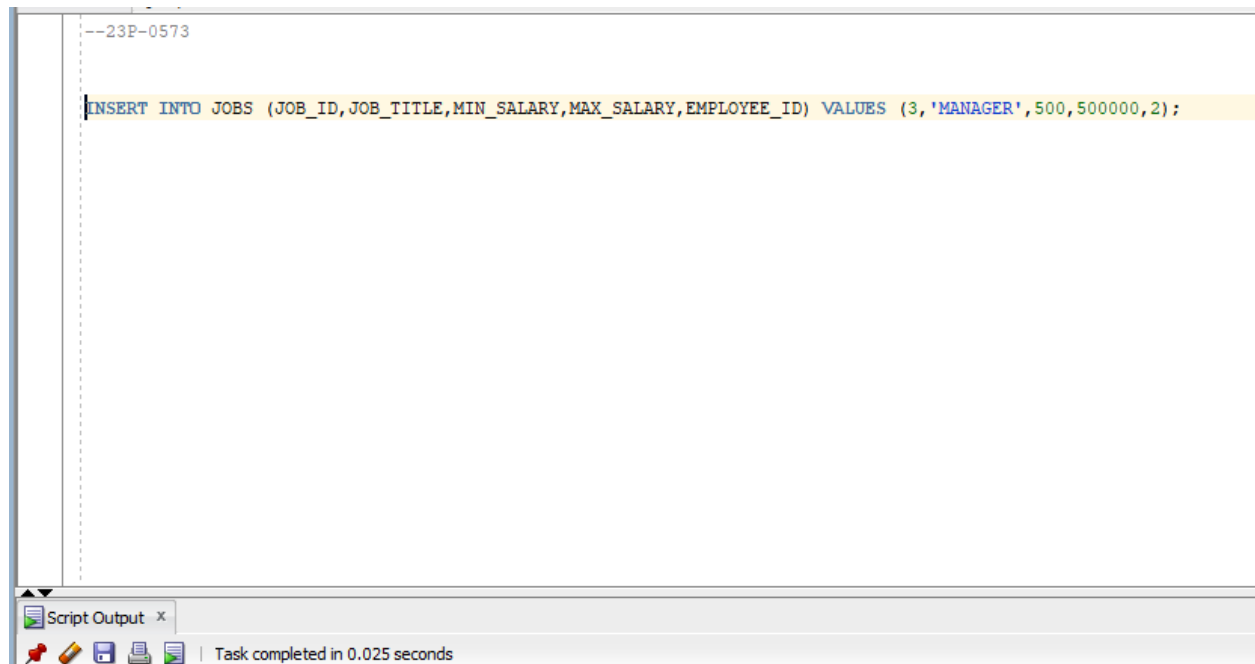
```
ALTER TABLE EMPLOYEES MODIFY EMPLOYEE_ID NOT NULL;  
ALTER TABLE EMPLOYEES ADD CONSTRAINT Pk_EMP_ID PRIMARY KEY(EMPLOYEE_ID);  
  
ALTER TABLE JOBS ADD EMPLOYEE_ID INT;  
ALTER TABLE JOBS ADD CONSTRAINT FOREIGN_KEY_IN_JOBS  
FOREIGN KEY(EMPLOYEE_ID) REFERENCES EMPLOYEES(EMPLOYEE_ID);
```

Script Output x

Task completed in 0.026 seconds

Table EMPLOYEES altered.

(13) INSERT INTO JOBS (JOB_ID,JOB_TITLE,MIN_SALARY,MAX_SALARY,EMPLOYEE_ID)
VALUES (3,'MANAGER',500,500000,2);



(14)

ALTER TABLE DEPARTMENTS DROP COLUMN SPECIALITY;

--23P-0573

```
ALTER TABLE DEPARTMENTS DROP COLUMN SPECIALITY;
```

Script Output x

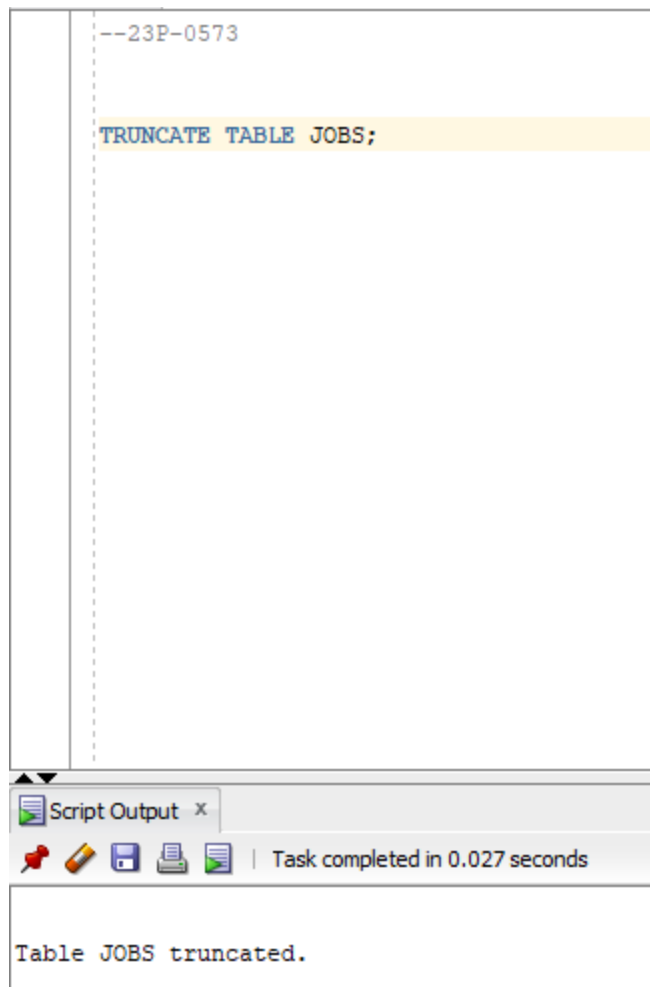
Task completed in 0.051 seconds

ACTION:

Table DEPARTMENTS altered.

(15)

TRUNCATE TABLE JOBS;



(16) INTO JOBS (JOB_ID,JOB_TITLE,MIN_SALARY,MAX_SALARY,EMPLOYEE_ID) VALUES
(4,'Finance Manager',8200,160000,5);

```
--23P-0573

INSERT INTO JOBS (JOB_ID,JOB_TITLE,MIN_SALARY,MAX_SALARY,EMPLOYEE_ID) VALUES (4,'Finance Manager',8200,160000,5);
```

Script Output x

(17) update EMPLOYEES set full_name = upper(FULL_NAME);

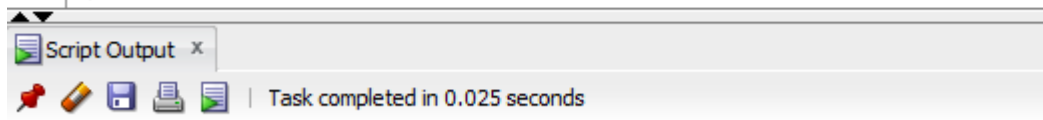
-- update the fullname to the capital

ALTER TABLE EMPLOYEES ADD CONSTRAINT CHECK_FULL_NAME CHECK (FULL_NAME = UPPER(FULL_NAME));

--23P-0573

```
update EMPLOYEES set full_name = upper(FULL_NAME);  
-- update the fullname to the capital
```

```
ALTER TABLE EMPLOYEES ADD CONSTRAINT CHECK_FULL_NAME CHECK  
(FULL_NAME = UPPER(FULL_NAME));
```



4 rows updated.

Table EMPLOYEES altered.

(18)

Alter table employees modify phone_no unique not null;

--23P-0573

```
Alter table employees modify phone_no unique not null;
```

(19) insert into employees

(EMPLOYEE_ID,full_name,salary,department_id,start_date,end_date,married,phone_NO)values(6,'HARIS',90000,105,TO_DATE('2020-11-18', 'YYYY-MM-DD'),NULL,'NO',3000000);

--23P-0573

```
Insert into employees (EMPLOYEE_ID,full_name,salary,department_id,start_date,end_date,married,phone_NO)values(6,'HARIS',90000,105,TO
```

Script Output x

Task completed in 0.021 seconds

1 row inserted.

(20)

UPDATE EMPLOYEES SET SALARY = SALARY*3 WHERE SALARY < 1000;

--23P-0573

```
UPDATE EMPLOYEES SET SALARY = SALARY*3 WHERE SALARY < 1000;
```

Script Output x

Task completed in 0.02 seconds

0 rows updated.

(21) ALTER TABLE EMPLOYEES RENAME COLUMN PHONE_NO TO PHONE_NUMBER;
ALTER TABLE JOBS DROP CONSTRAINT FOREIGN_KEY_IN_JOBS; RENAME JOBS TO
job_details;

ALTER TABLE JOB_DETAILS ADD CONSTRAINT FOREIGN_KEY_IN_JOBS_ID FOREIGN KEY
(EMPLOYEE_ID) REFERENCES EMPLOYEES (EMPLOYEE_ID);

--23P-0573

```
ALTER TABLE EMPLOYEES RENAME COLUMN PHONE_NO TO PHONE_NUMBER;  
ALTER TABLE JOBS DROP CONSTRAINT FOREIGN_KEY_IN_JOBS;  
RENAME JOBS TO job_details;
```

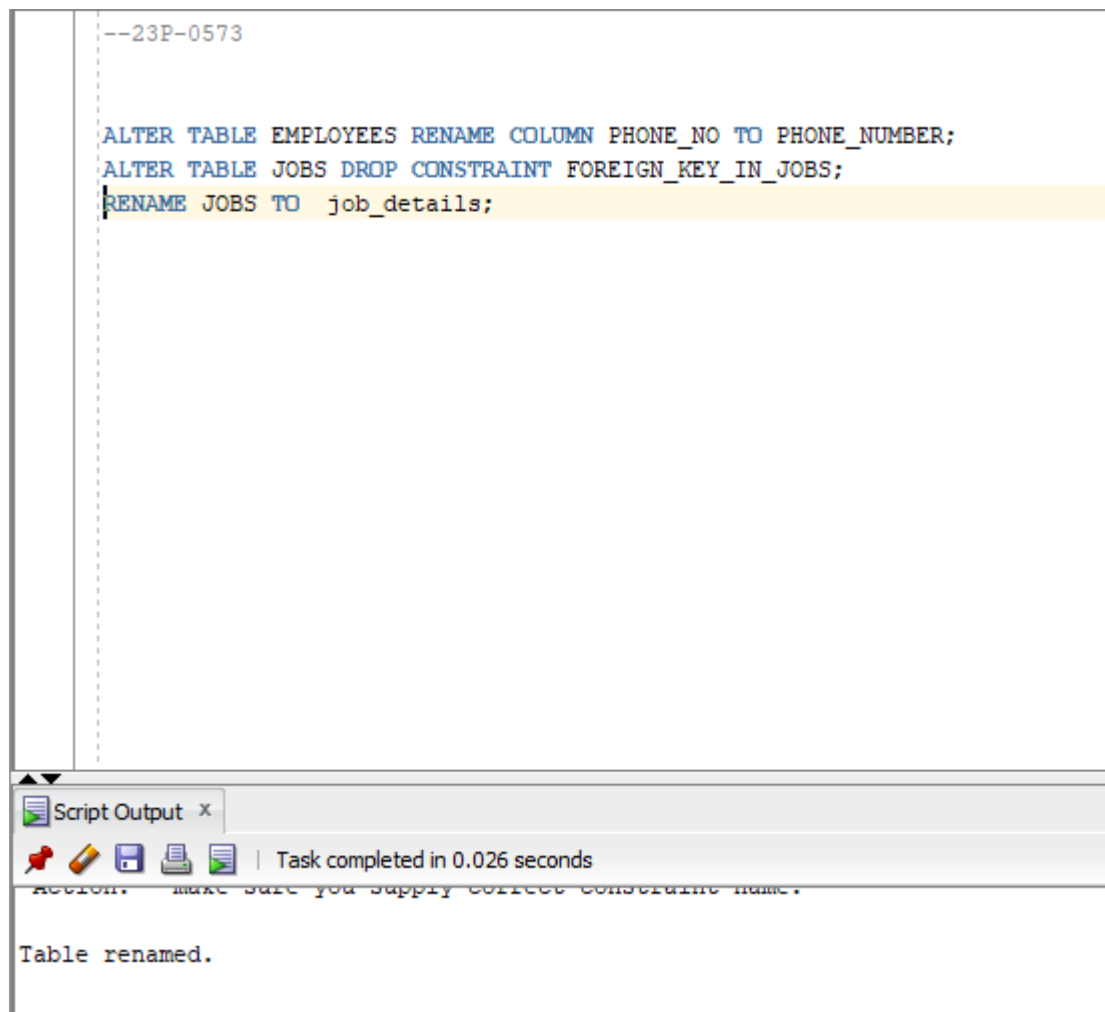
Script Output x



Task completed in 0.026 seconds

Action: make sure you supply correct constraint name.

Table renamed.



(22) ALTER TABLE EMPLOYEES ADD CONSTRAINT COMPOSITE_PRIM_KEY PRIMARY
KEY(EMPLOYEE_ID,JOB_ID);

--THIS ERROR MEANS THAT JOB_ID DOES NOT EXIST IN THE EMPLOYEES TABLE

--23P-0573

```
ALTER TABLE EMPLOYEES ADD CONSTRAINT COMPOSITE_PRIM_KEY PRIMARY KEY(EMPLOYEE_ID,JOB_ID);  
--THIS ERROR MEANS THAT JOB_ID DOES NOT EXIST IN THE EMPLOYEES TABLE
```



(23)

```
ALTER TABLE JOB_DETAILS ADD STARTING_YEAR INT; UPDATE JOB_DETAILS SET  
STARTING_YEAR = 1889 WHERE JOB_ID = 3;
```

```
DELETE FROM JOB_DETAILS WHERE STARTING_YEAR < 1900;
```



```
--23P-0573

ALTER TABLE JOB_DETAILS ADD STARTING_YEAR INT;
UPDATE JOB_DETAILS SET STARTING_YEAR = 1889 WHERE JOB_ID = 3;

DELETE FROM JOB_DETAILS WHERE STARTING_YEAR < 1900;
```

Script Output x

Task completed in 0.023 seconds

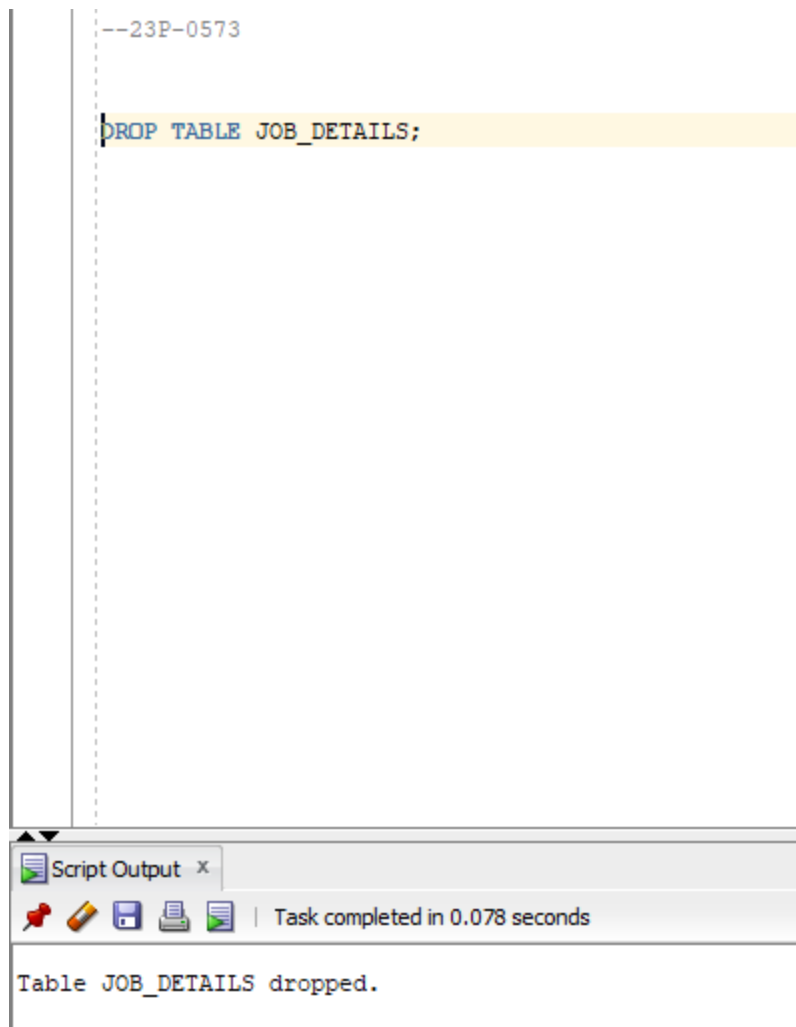
Table JOB_DETAILS altered.

0 rows updated.

0 rows deleted.

(24)

DROP TABLE JOB_DETAILS;



(25)

CREATE INDEX indx_employee_id ON EMPLOYEES(EMPLOYEE_ID); CREATE INDEX
indx_department_id ON EMPLOYEES(DEPARTMENT_ID);

--23P-0573

```
CREATE INDEX indx_employee_id ON EMPLOYEES(EMPLOYEE_ID);  
CREATE INDEX indx_department_id ON EMPLOYEES(DEPARTMENT_ID);
```

Script Output x

Task completed in 0.024 seconds

Index INDX_EMPLOYEE_ID created.

Index INDX_DEPARTMENT_ID created.

(26)

create table suppliers(

Supplier_ID INT NOT NULL PRIMARY KEY,

SUPPLIER_NAME VARCHAR(25) NOT NULL UNIQUE,

CONTACT_NAME VARCHAR(25), PHONE_NUMBER INT NOT NULL, EMAIL INT UNIQUE);

alter table suppliers modify email varchar(20);

```
--23P-0573

create table suppliers(

    Supplier_ID INT NOT NULL PRIMARY KEY,
    SUPPLIER_NAME VARCHAR(25) NOT NULL UNIQUE,
    CONTACT_NAME VARCHAR(25),
    PHONE_NUMBER INT NOT NULL,
    EMAIL INT UNIQUE
);
alter table suppliers modify email varchar(20);
```

Script Output x

Task completed in 0.034 seconds

Table SUPPLIERS created.

Table SUPPLIERS altered.

(27) create table PRODUCTS(

PRODUCT_ID INT NOT NULL, Product_Name VARCHAR(25) NOT NULL UNIQUE,
Supplier_ID INT, Category_ID INT, CONSTRAINT FOREIGN_KEY_Supplier_ID FOREIGN KEY
(Supplier_ID) REFERENCES suppliers(Supplier_ID), CONSTRAINT PRIMARY_KEY_PID
PRIMARY KEY (PRODUCT_ID));

```
--23P-0573

create table PRODUCTS(

PRODUCT_ID INT NOT NULL,
Product_Name VARCHAR(25) NOT NULL UNIQUE,
Supplier_ID INT,
Category_ID INT,
CONSTRAINT FOREIGN_KEY_Supplier_ID FOREIGN KEY (Supplier_ID) REFERENCES suppliers(Supplier_ID),
CONSTRAINT PRIMARY_KEY_PID PRIMARY KEY (PRODUCT_ID)
);
```

Script Output x

Task completed in 0.024 seconds

ORA-00955: name is already used by an existing object
00955. 00000 - "name is already used by an existing object"
*Cause:
*Action:

Snipping Tool

Screenshot copied to cl
Automatically saved to

(28) INSERT INTO SUPPLIERS
(SUPPLIER_ID,SUPPLIER_NAME,CONTACT_NAME,PHONE_NUMBER,EMAIL) VALUES
(5,'COMPANY1','mubeen',32014451,'fakegmail');






INSERT INTO PRODUCTS (PRODUCT_ID,PRODUCT_NAME,SUPPLIER_ID,CATEGORY_ID)
VALUES (5,'ELECTRONICS',3,4);

--23P-0573

```
INSERT INTO SUPPLIERS (SUPPLIER_ID,SUPPLIER_NAME,CONTACT_NAME,PHONE_NUMBER,EMAIL) VALUES  
(5, 'COMPANY1', 'mubeen', 32014451, 'fakegmail');
```

```
INSERT INTO PRODUCTS (PRODUCT_ID,PRODUCT_NAME,SUPPLIER_ID,CATEGORY_ID) VALUES  
(5, 'ELECTRONICS', 3, 4);
```

Script Output x

     | Task completed in 0.03 seconds

*Action:

1 row inserted.