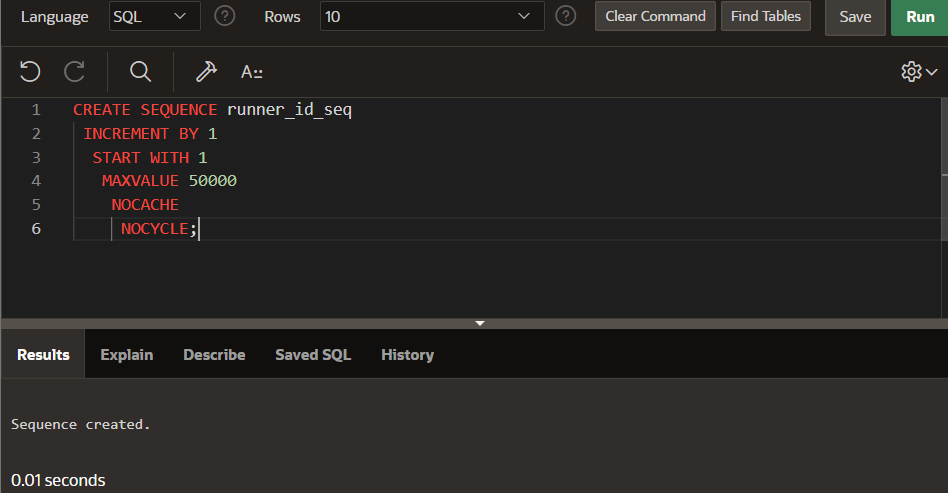
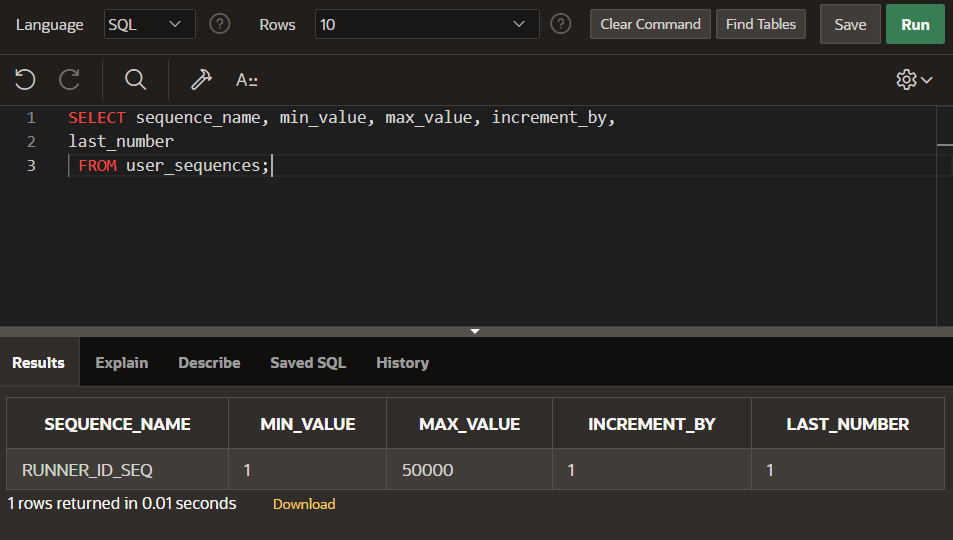
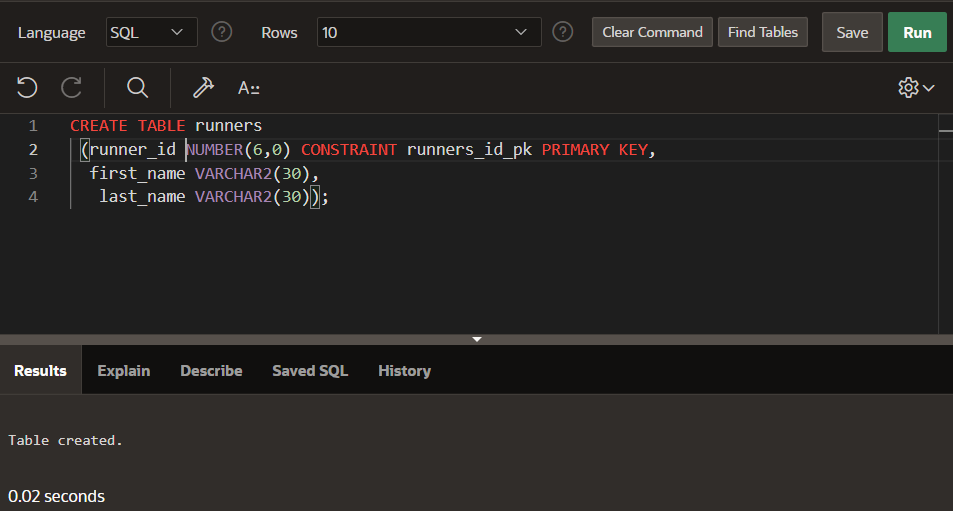
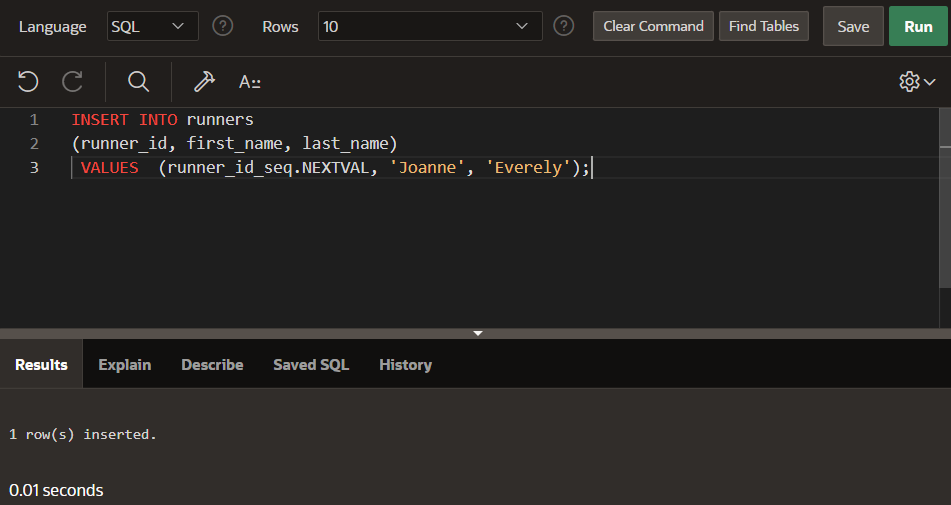
**Section 16**

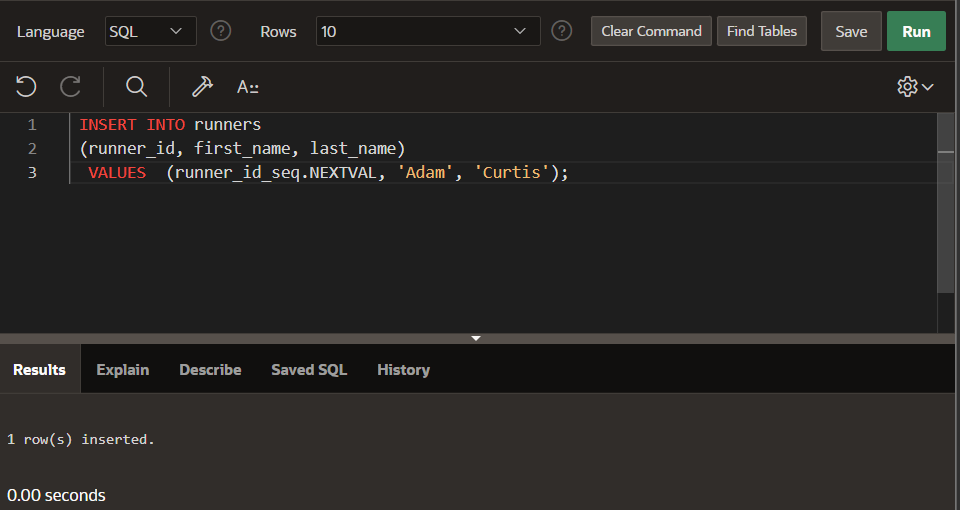
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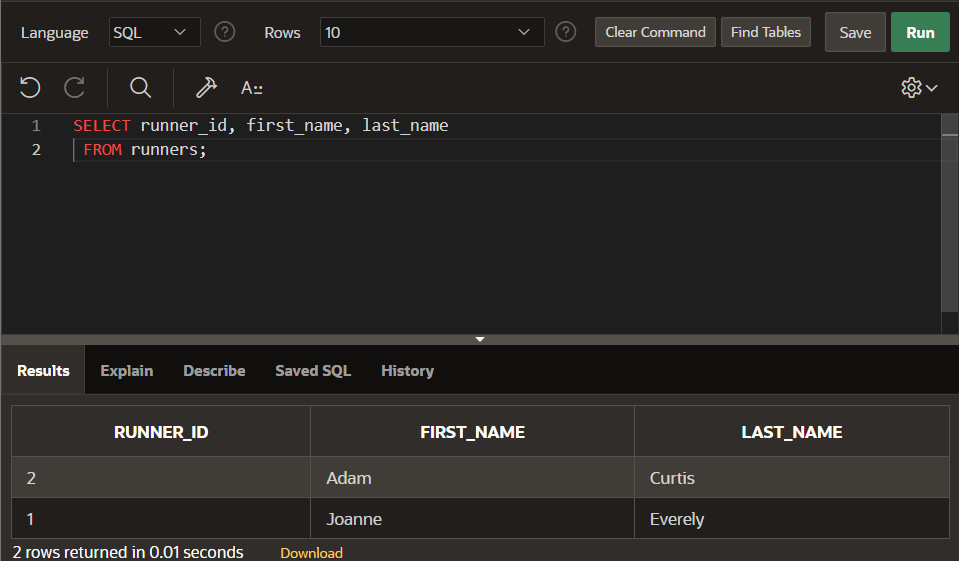
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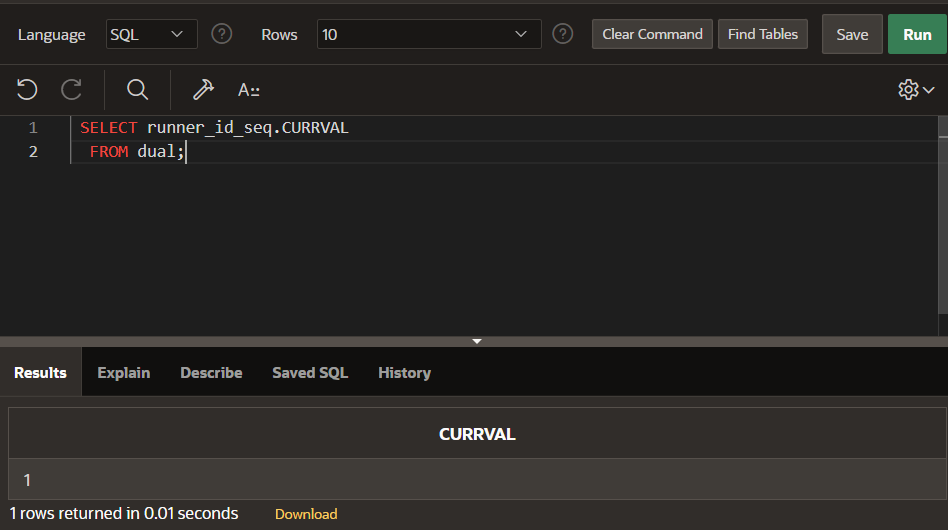
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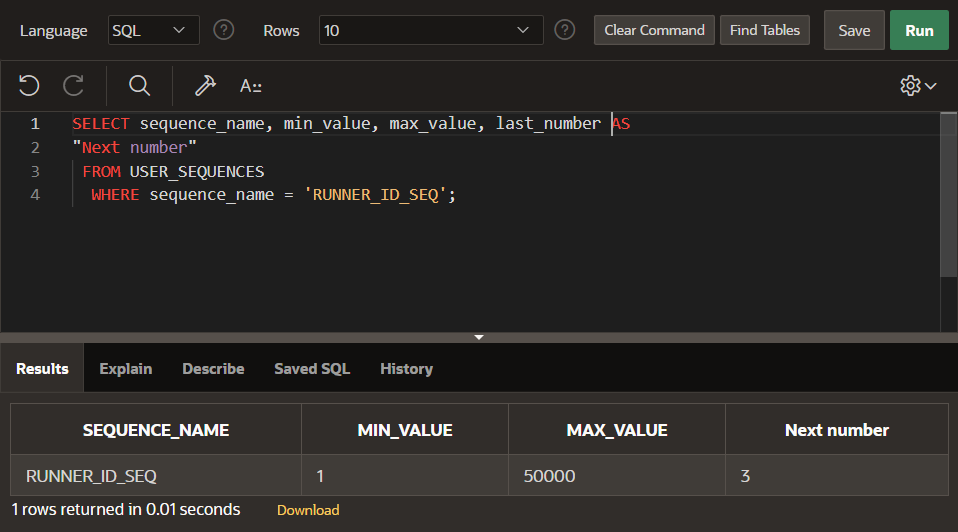
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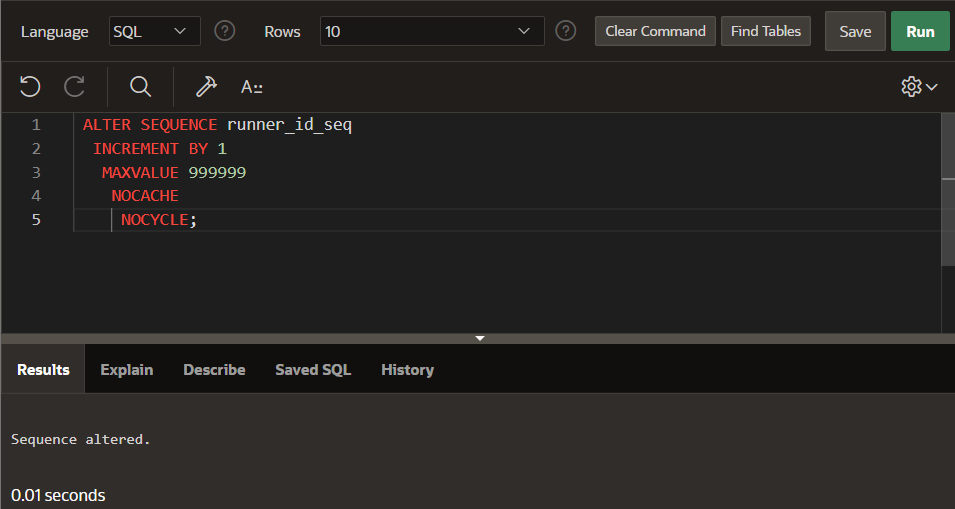
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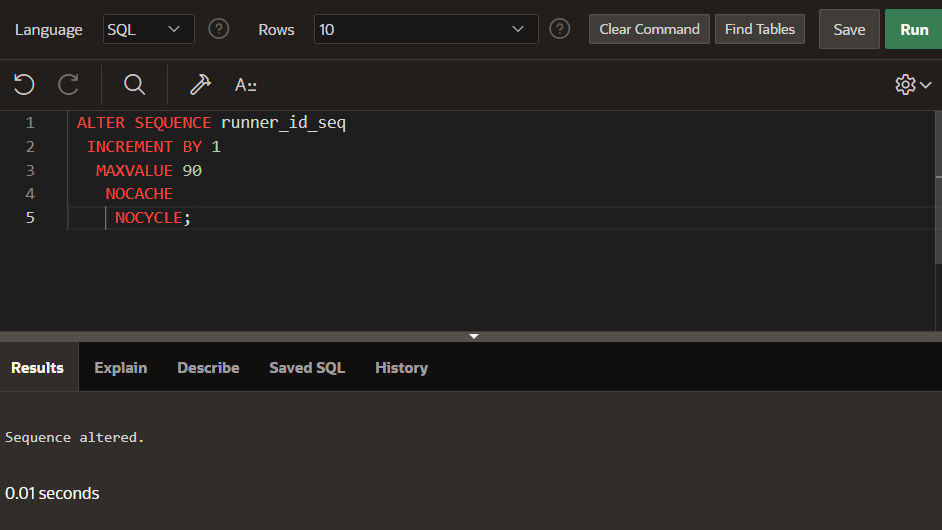
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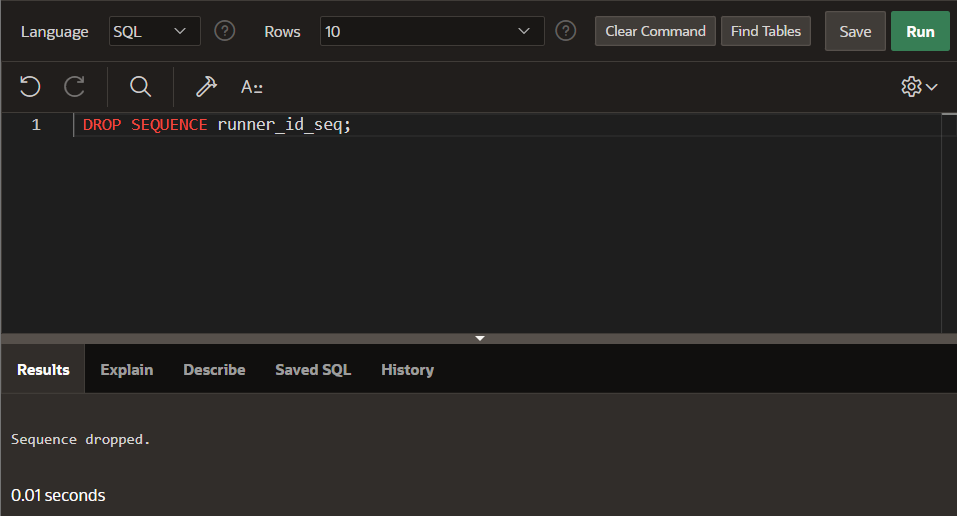
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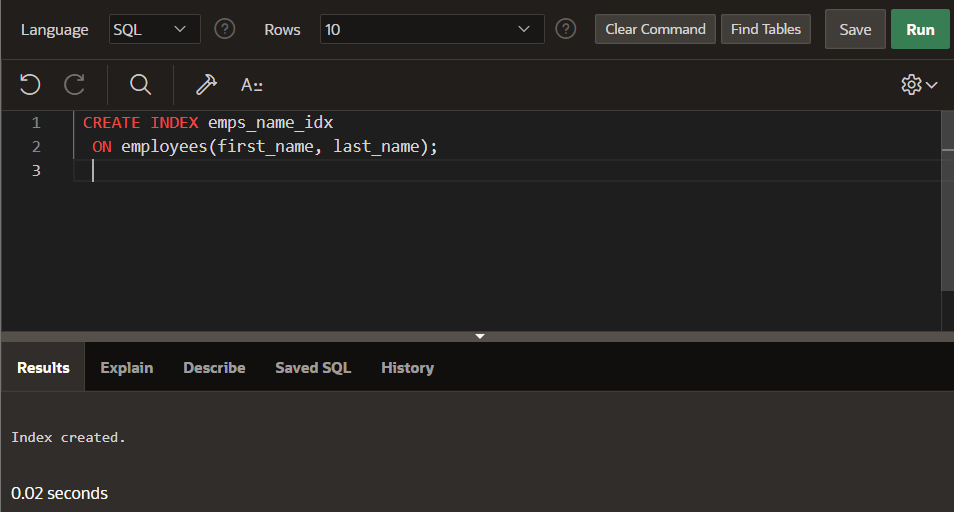
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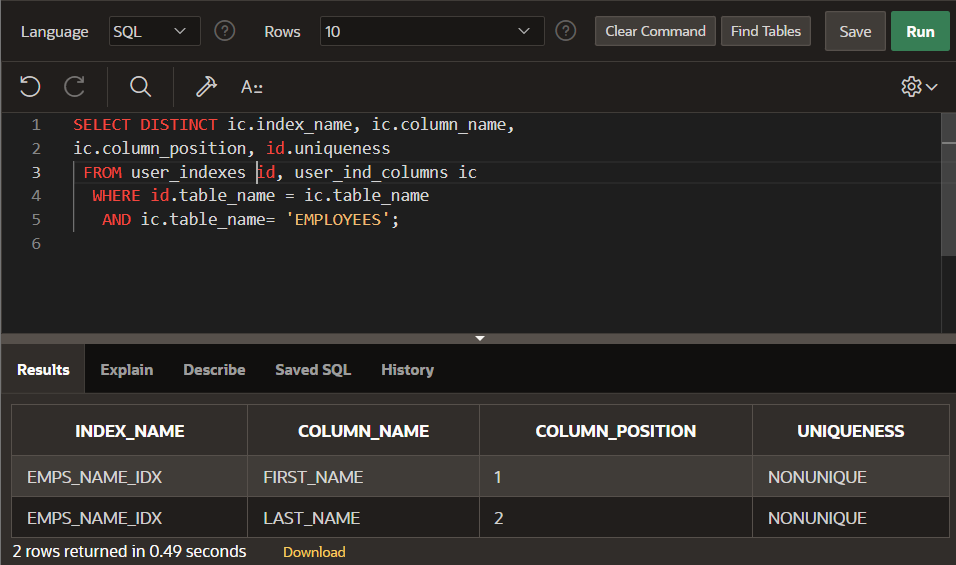
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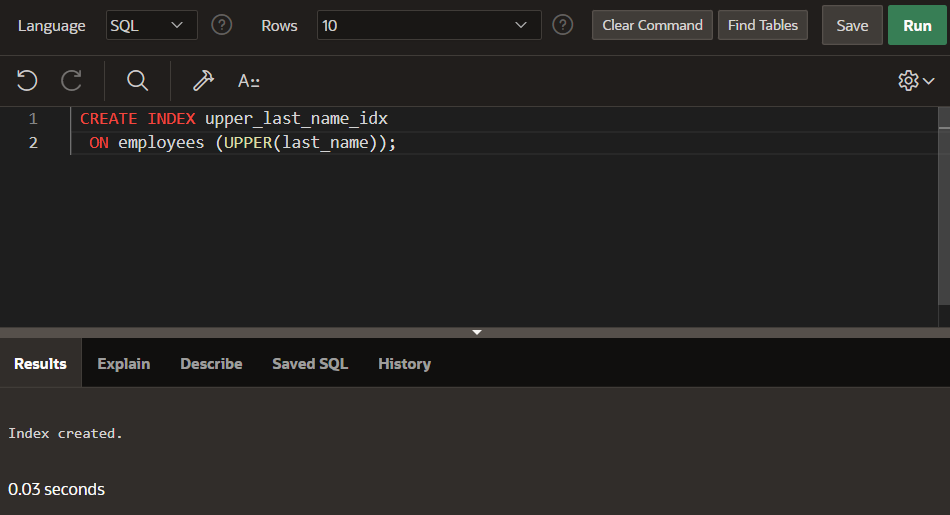
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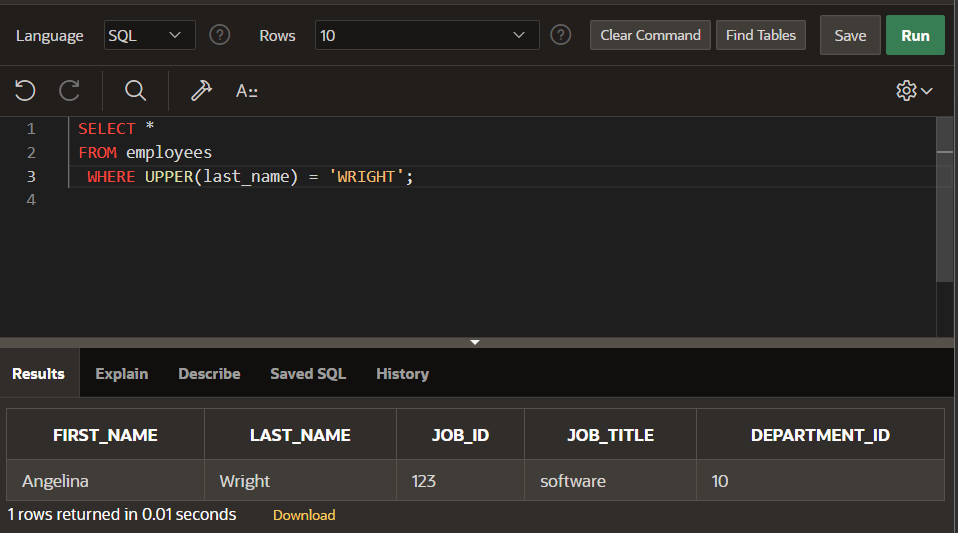
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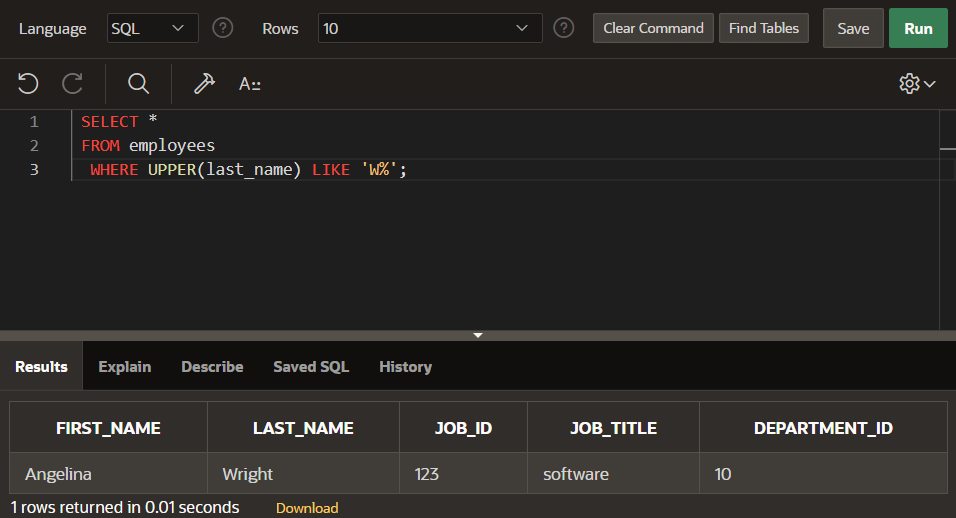
**DP 16.2:**

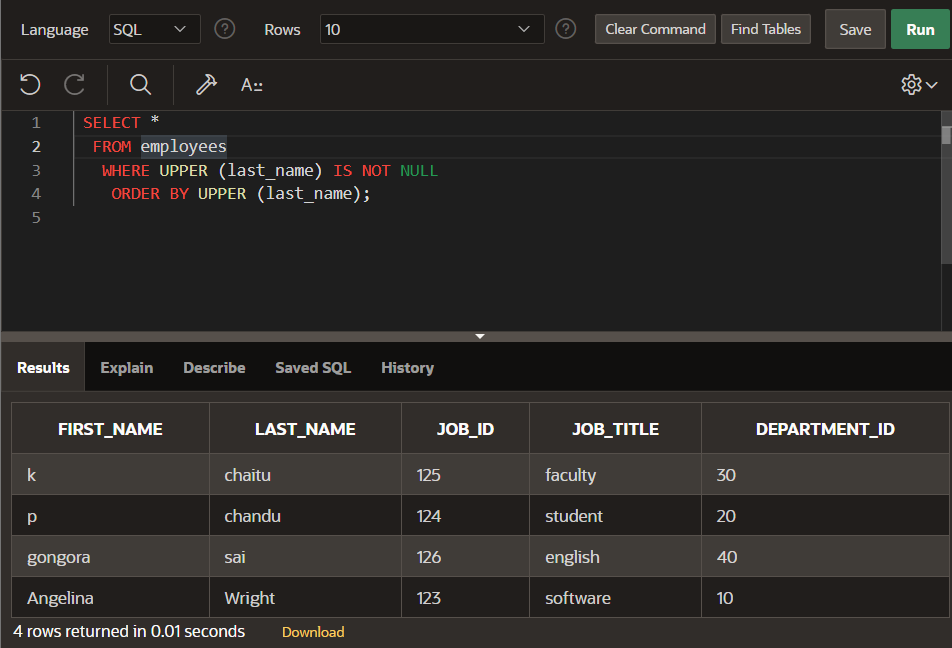
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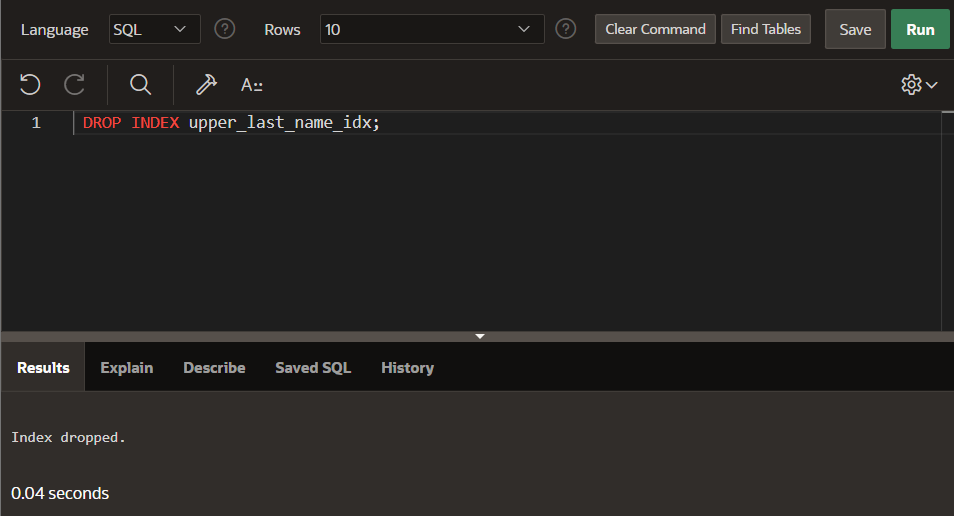
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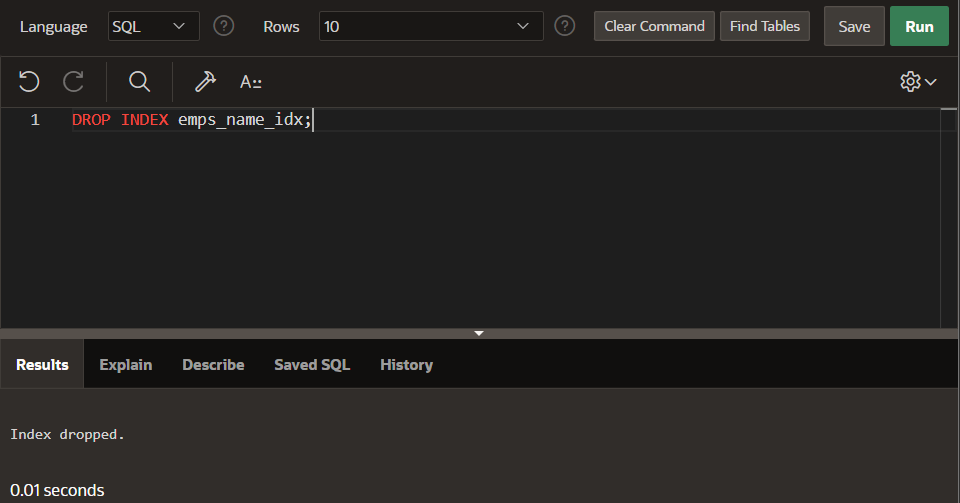
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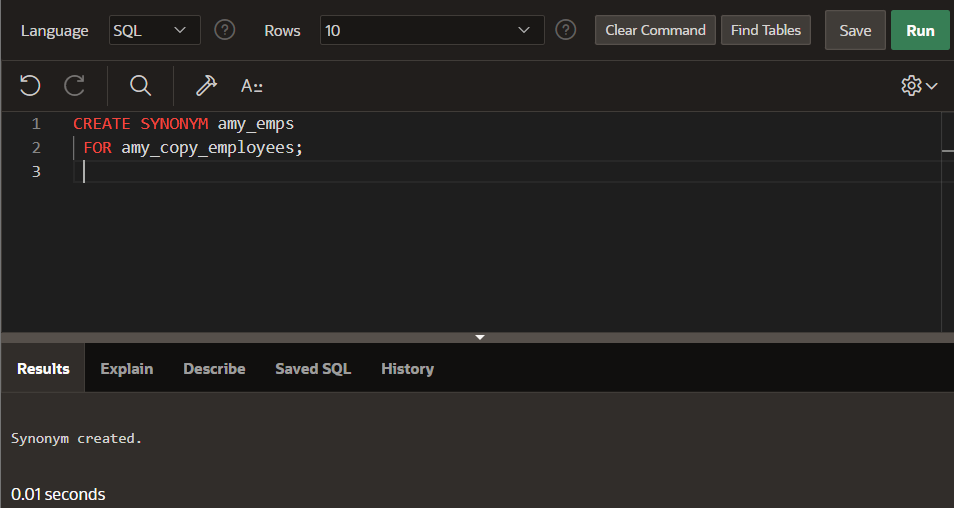
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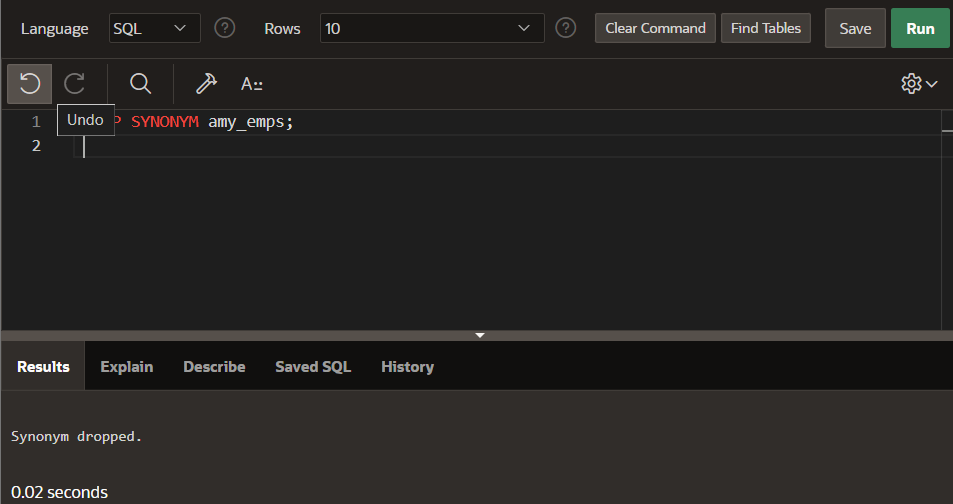
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**Section15**

**DP 15.1:**

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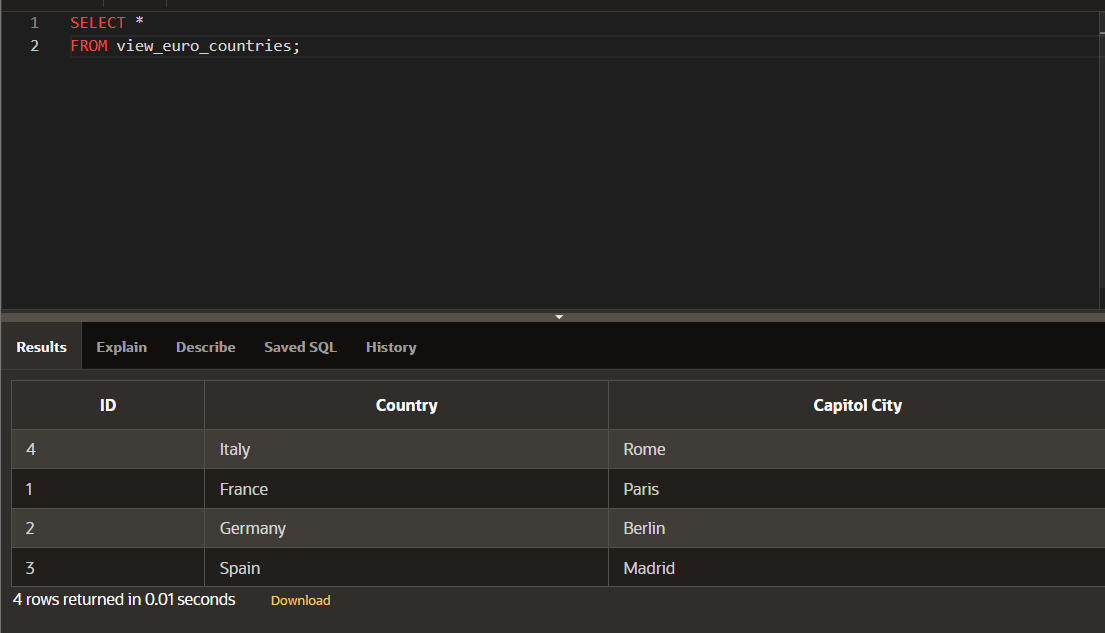
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**DP 15.2:**

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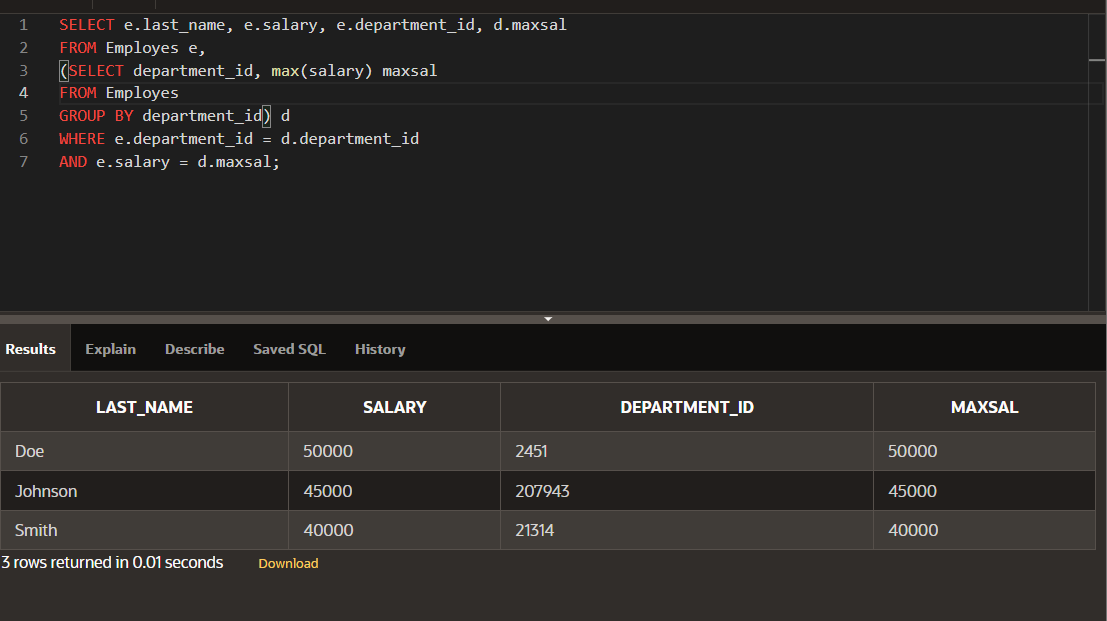
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**DP 15.3:**

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**Section14**

**DP 14.1:**

**1.create a table:**

**CREATE TABLE clients**

**(client\_number NUMBER(4),**

**first\_name VARCHAR2(14),**

**last\_name VARCHAR2(13)**

**);**

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**2.creating constraints:**

**CREATE TABLE client**

**(client\_number NUMBER(4) CONSTRAINT clients\_client\_num\_pk PRIMARY KEY,**

**first\_name VARCHAR2(14),**

**last\_name VARCHAR2(13));**

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**3.constraints at the column level**

**CREATE TABLE clients1**

**(client\_number NUMBER(4) CONSTRAINT clients\_cient\_num\_pk PRIMARY KEY,**

**last\_name VARCHAR2(13) CONSTRAINT clients\_last\_name\_nn NOT NULL,**

**email VARCHAR2(80) CONSTRAINT clients\_emil\_uk UNIQUE**

**);**

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**4.user name constraint and system name constraint:**

**CREATE TABLE clie**

**(client\_number NUMBER(4) CONSTRAINT clie\_clie\_num\_pk PRIMARY KEY,**

**last\_name VARCHAR2(13) NOT NULL,**

**email VARCHAR2(80));**

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**5.constraints at the table level:**

**CREATE TABLE clien (**

**client\_number NUMBER(6) NOT NULL,**

**first\_name VARCHAR2(20),**

**last\_name VARCHAR2(20),**

**phone VARCHAR2(20),**

**email VARCHAR2(10) NOT NULL,**

**CONSTRAINT clients\_phone\_email\_uk UNIQUE (email,phone)**

**);**

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**6.violation:**

**CREATE TABLE clients(**

**client\_number NUMBER(6),**

**first\_name VARCHAR2(20),**

**last\_name VARCHAR2(20),**

**phone VARCHAR2(20) CONSTRAINT phone\_email\_uk UNIQUE(email,phone),**

**email VARCHAR2(10) CONSTRAINT NOT NULL,**

**CONSTRAINT emailclients\_email NOT NULL,**

**CONSTRAINT clients\_client\_num\_pk PRIMARY KEY (client\_number)**

**);**

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**7.unique constraint example:**

**insert into clients4(client\_number,first\_name,last\_name,phone,email)**

**values (01,vishnu,chaithanya,564123,'vishnu@123');**

**insert into clients4(client\_number,first\_name,last\_name,phone,email)**

**values (02,pusalapati,chandu,54896,'chandu@123');**

**insert into clients4(client\_number,first\_name,last\_name,phone,email)**

**values (03,'gongora','sai',5549864123,'vishnu@123');**

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**8.composite unique:**

**insert into clients5(client\_number,first\_name,last\_name,phone,email)**

**values (01,rv,saai,246,'abced@123');**

**insert into clients5(client\_number,first\_name,last\_name,phone,email)**

**values (02,chandu,raj,5647589,'abcd@123');**

**insert into clients5(client\_number,first\_name,last\_name,phone,email)**

**values (03,'abcd','sai',564789,'abcd@123');**

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**DP 14.2:**

**Primary key:**

**CREATE TABLE client**

**(client\_number NUMBER(4) CONSTRAINT clients\_client\_num\_pk PRIMARY KEY,**

**first\_name VARCHAR2(14),**

**last\_name VARCHAR2(13));**

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**Constraints at the table level(primary key):**

**CREATE TABLE cli**

**(client\_number NUMBER(4),**

**first\_name VARCHAR2(14),**

**last\_name VARCHAR2(13),**

**CONSTRAINT cli\_num\_pk PRIMARY KEY (client\_number));**

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**primary key constraint:**

**CREATE TABLE copy\_job\_history**

**(employee\_id NUMBER(6,0),**

**start\_date DATE,**

**job\_id VARCHAR2(10),**

**department\_id NUMBER(4,0),**

**CONSTRAINT copy\_jhist\_id\_st\_date\_pk PRIMARY KEY(employee\_id,**

**start\_date));**

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**foreign key:**

**CREATE TABLE copy\_employees**

**(employee\_id NUMBER(6,0) CONSTRAINT copy\_emp\_pk PRIMARY KEY,**

**first\_name VARCHAR2(20),**

**last\_name VARCHAR2(25),**

**department\_id NUMBER(4,0) CONSTRAINT c\_emps\_dept\_id\_fk**

**REFERENCES departments(department\_id),**

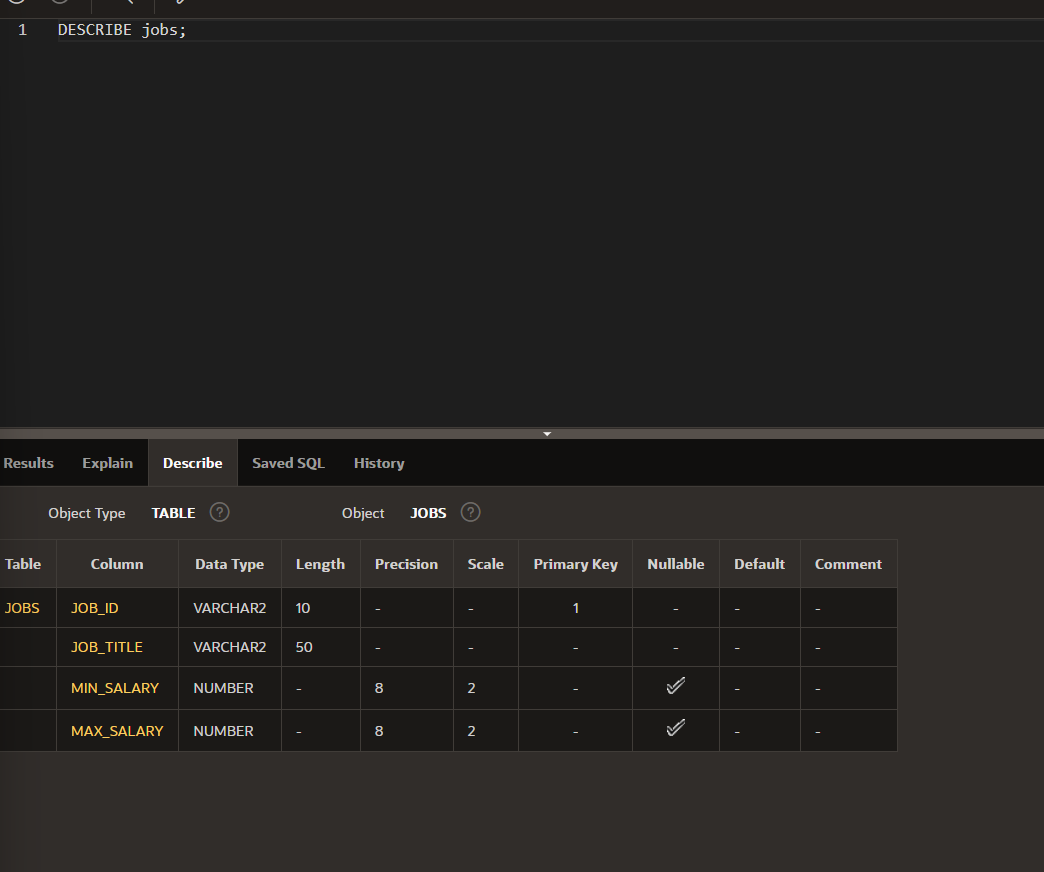
**email VARCHAR2(25));**

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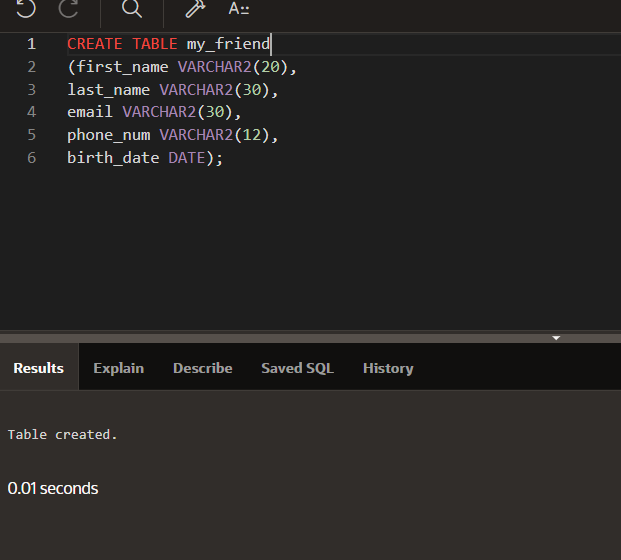
**Section13**

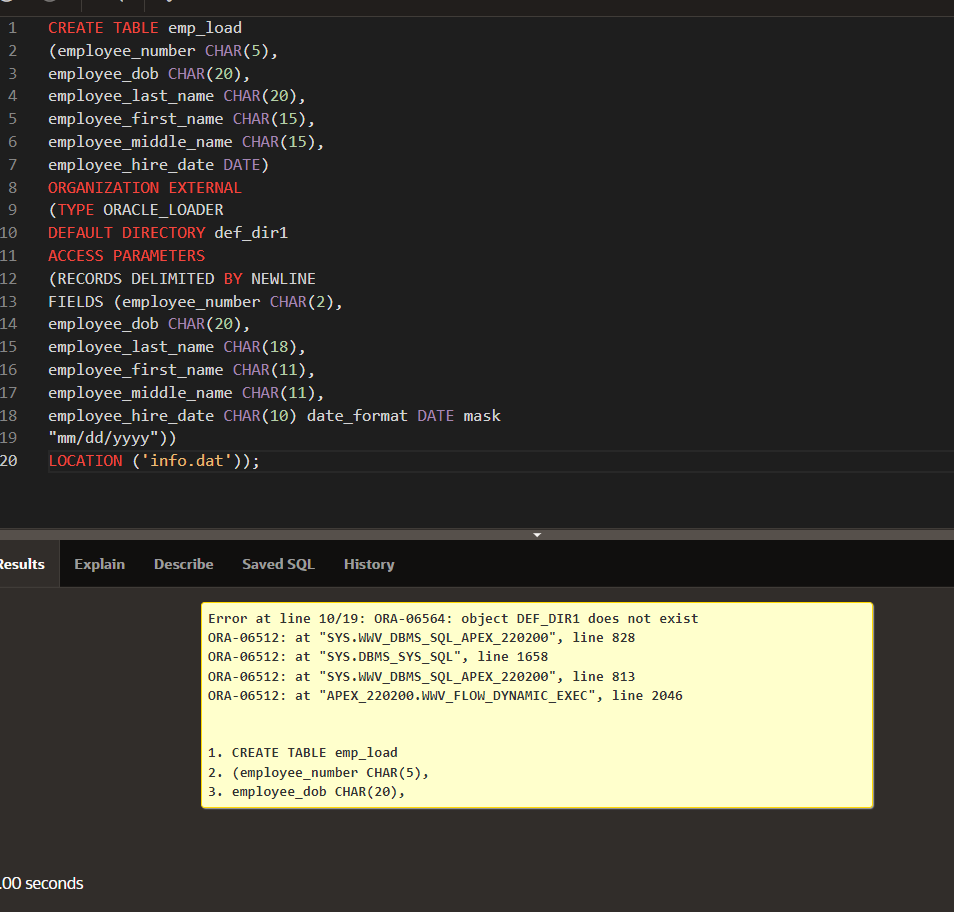
**DP 13.1:**

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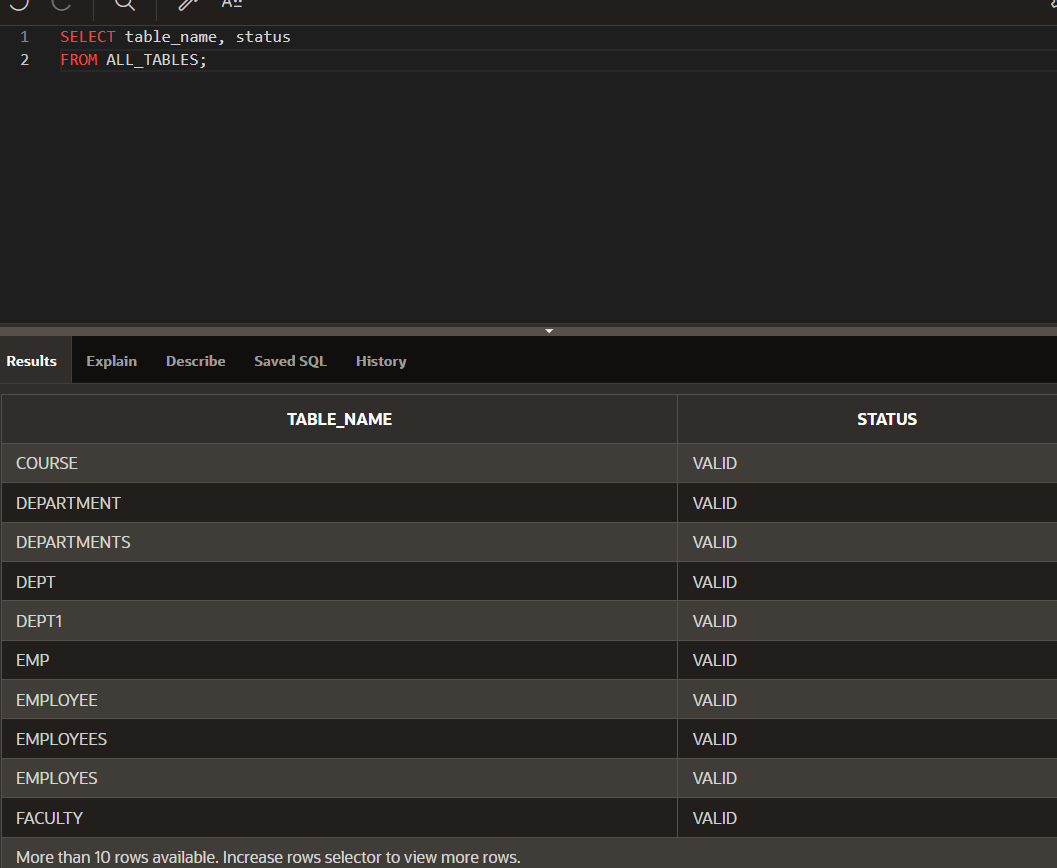
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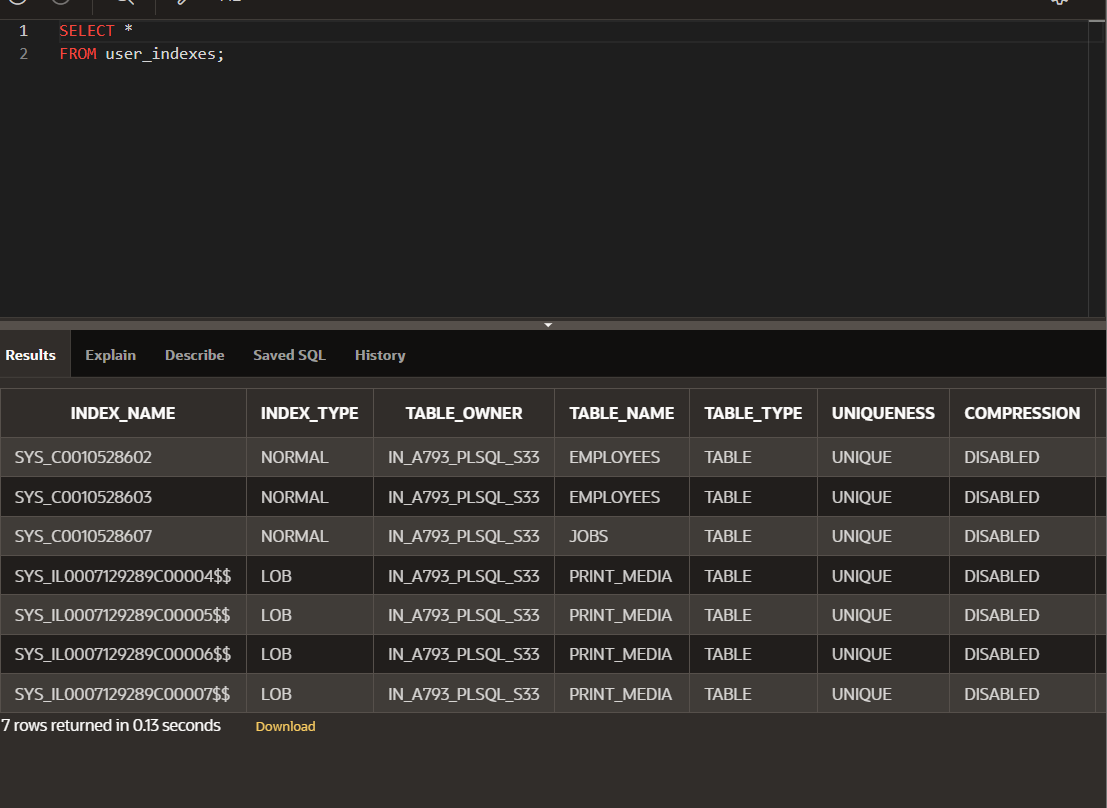
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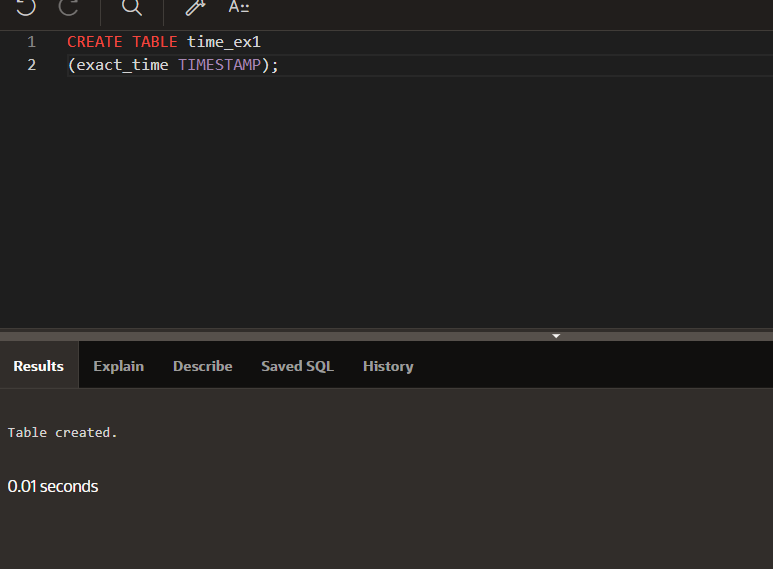
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**DP 13.2:**

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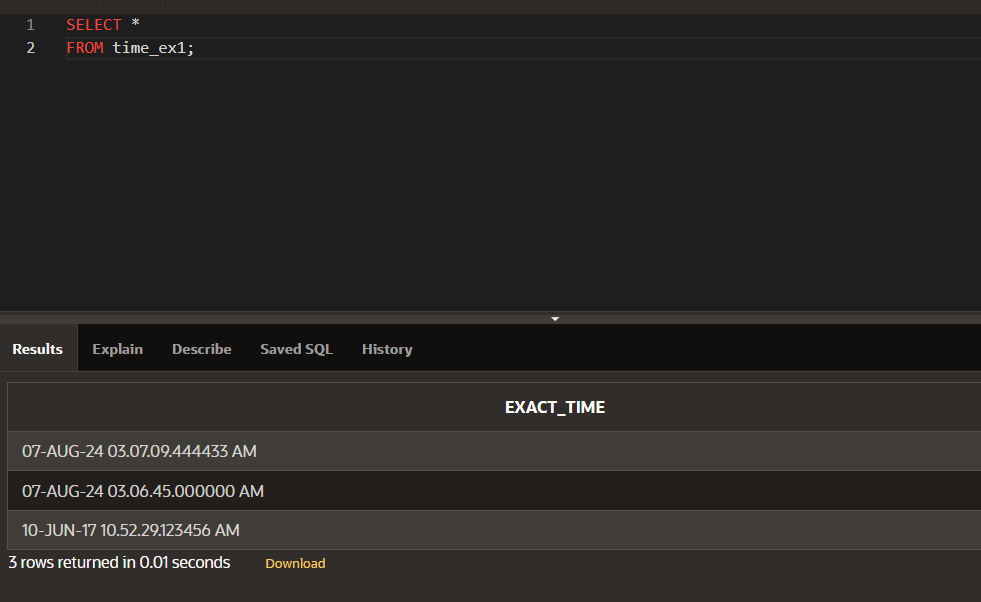
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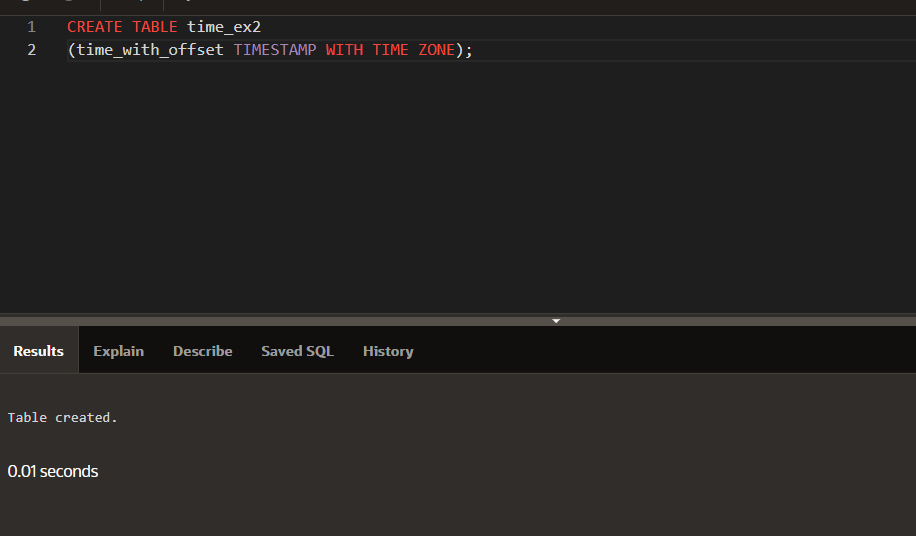
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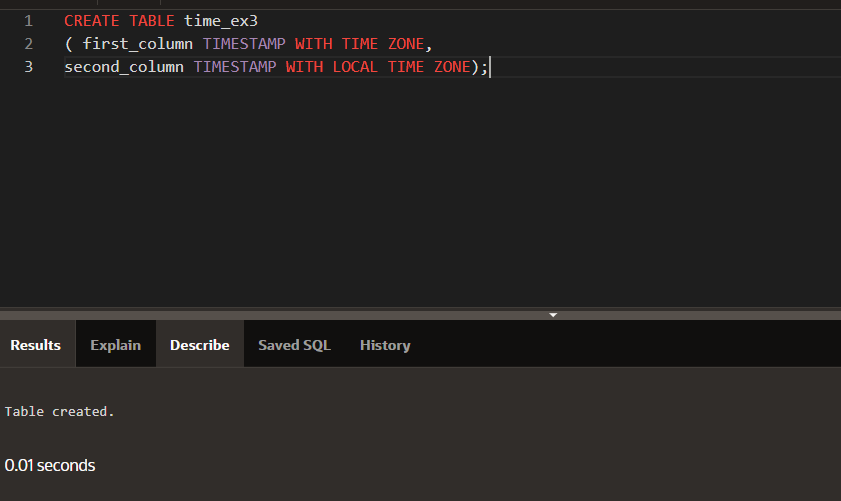
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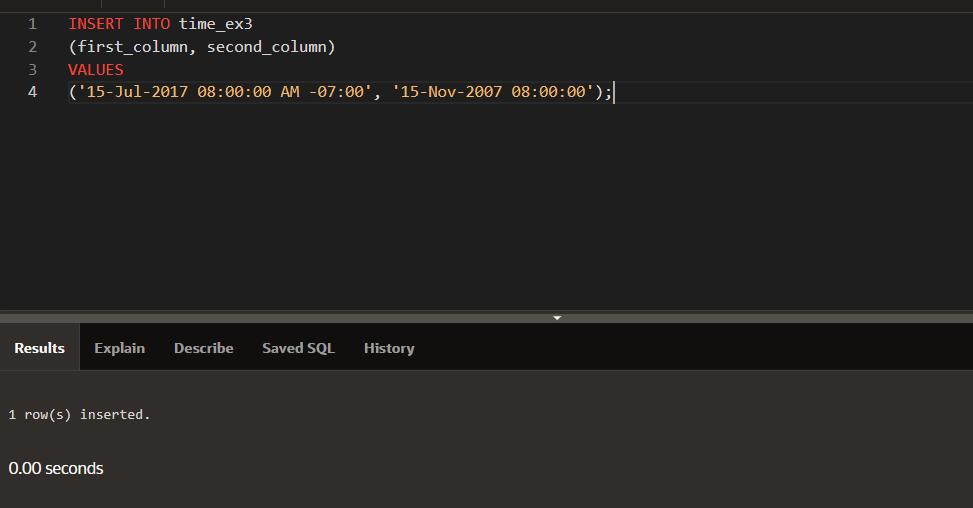
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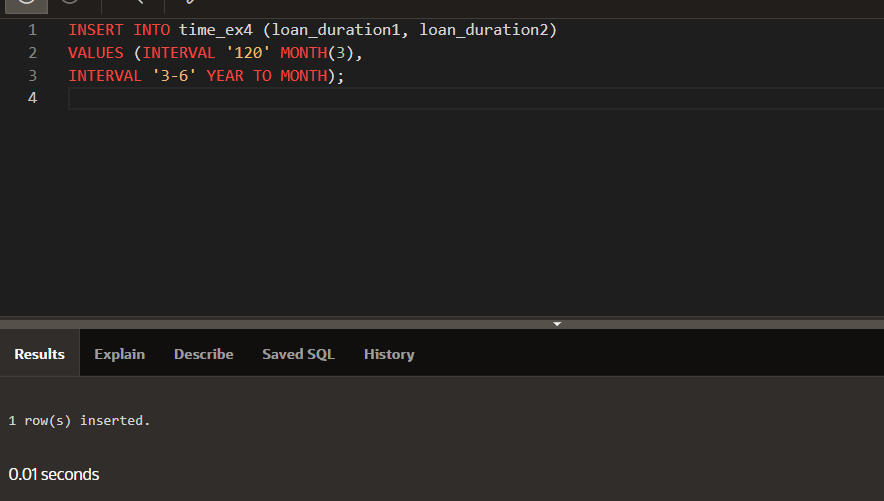
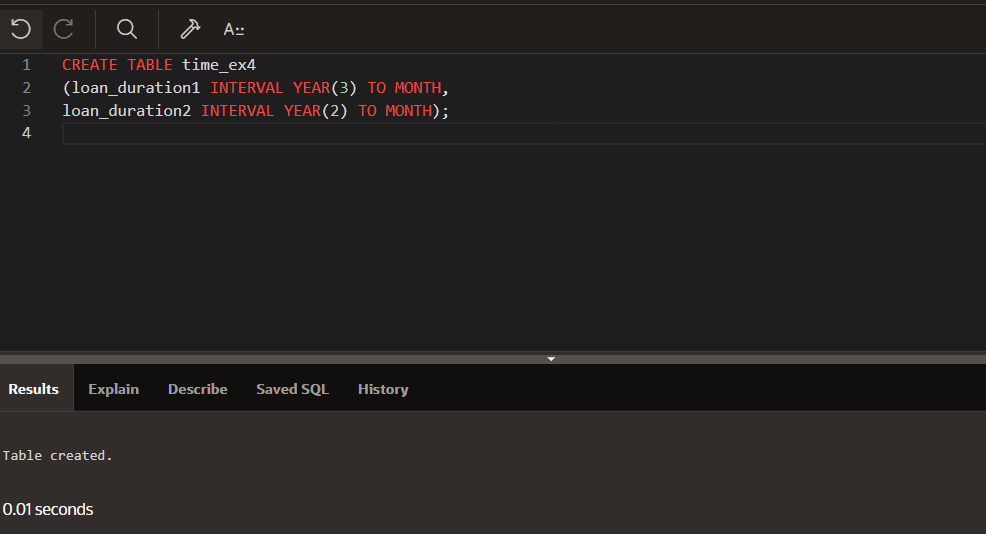
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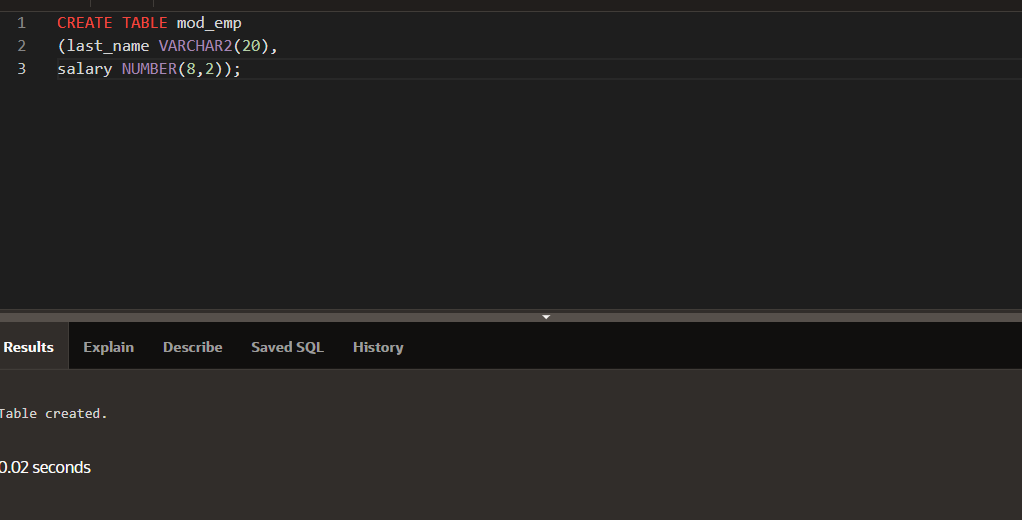
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**DP 13.3:A screenshot of a computer program

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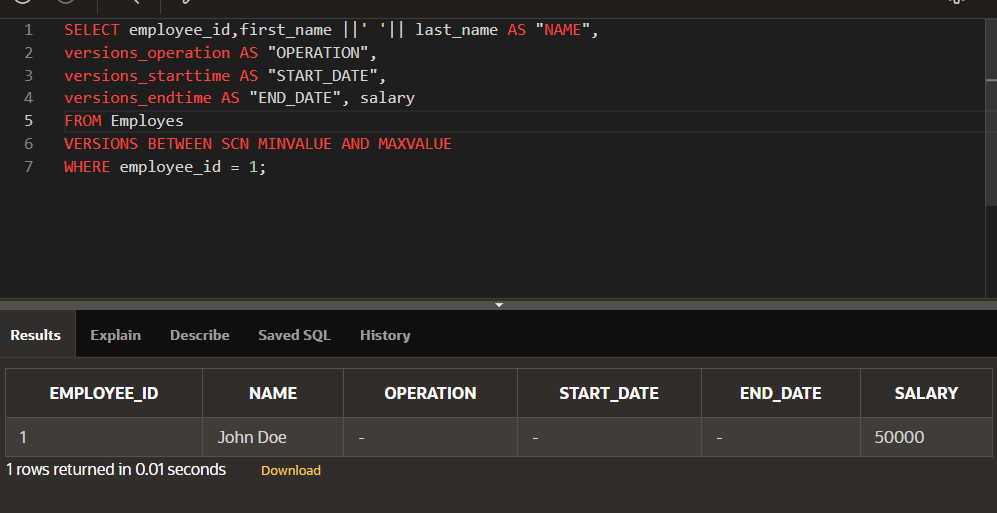
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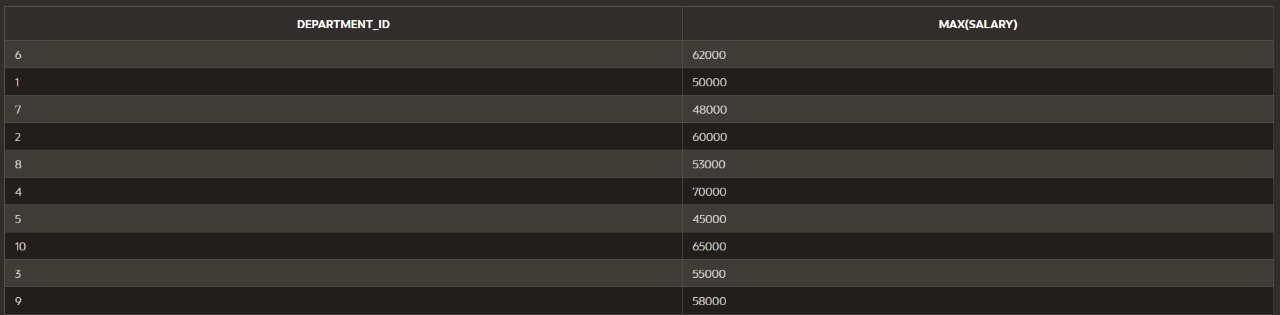
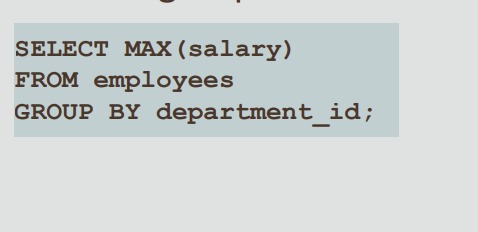
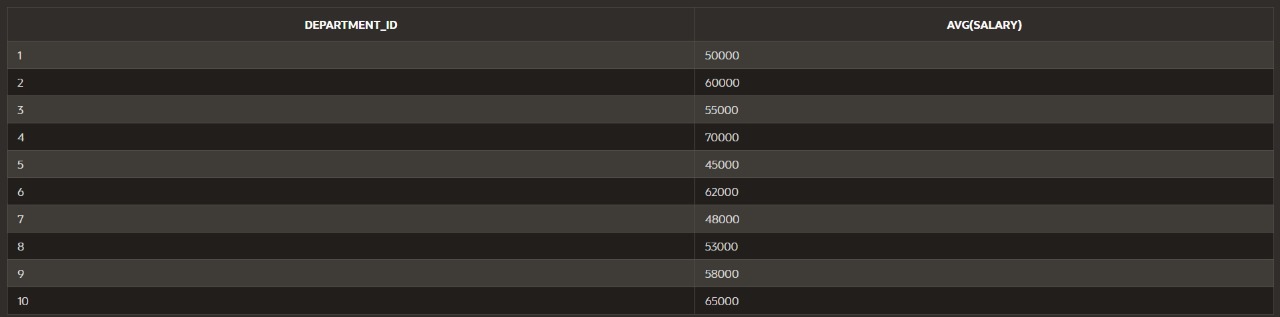
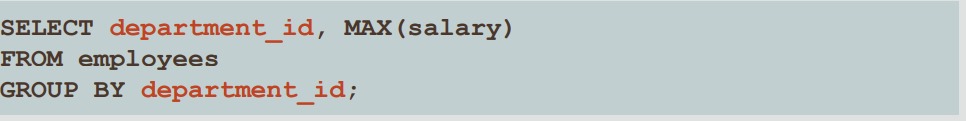
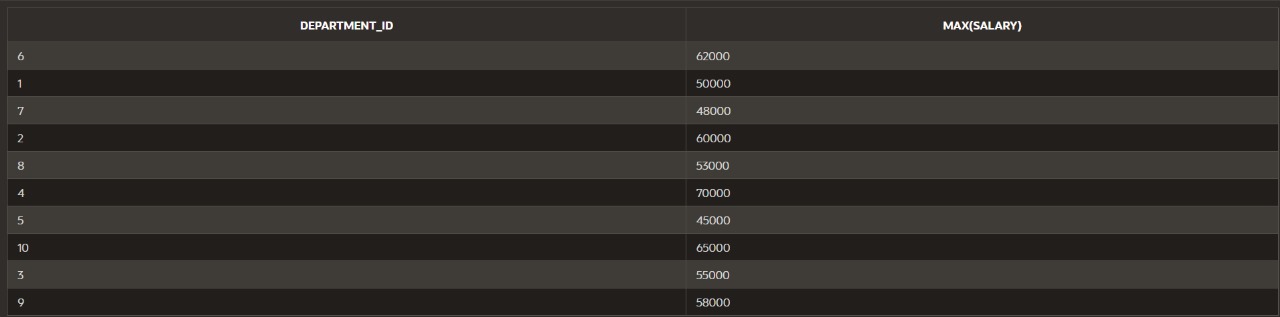
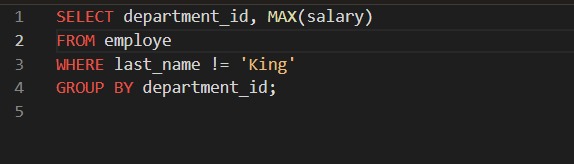
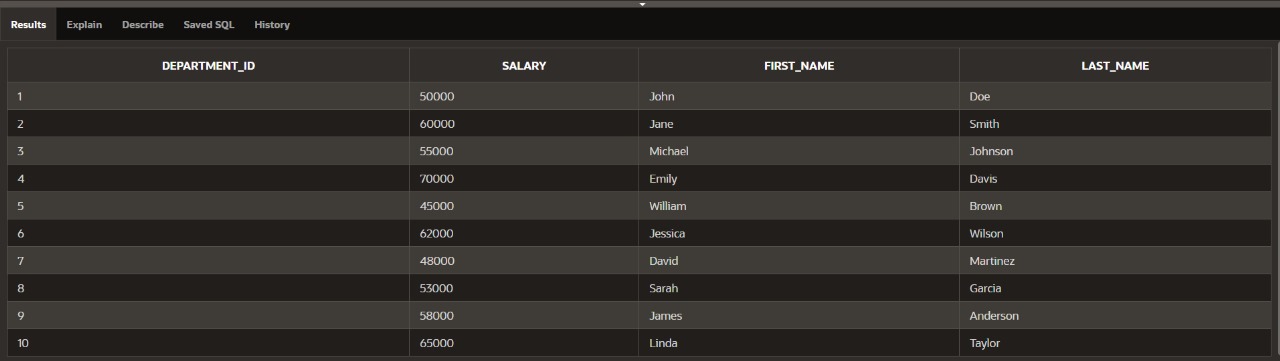
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12\_1





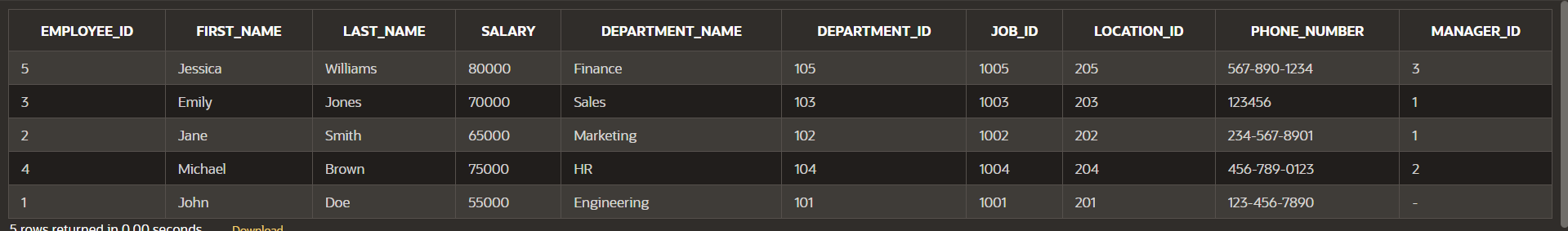
Dp 12\_2

UPDATE copy\_employees

SET phone\_number = '123456'

WHERE employee\_id = 3;

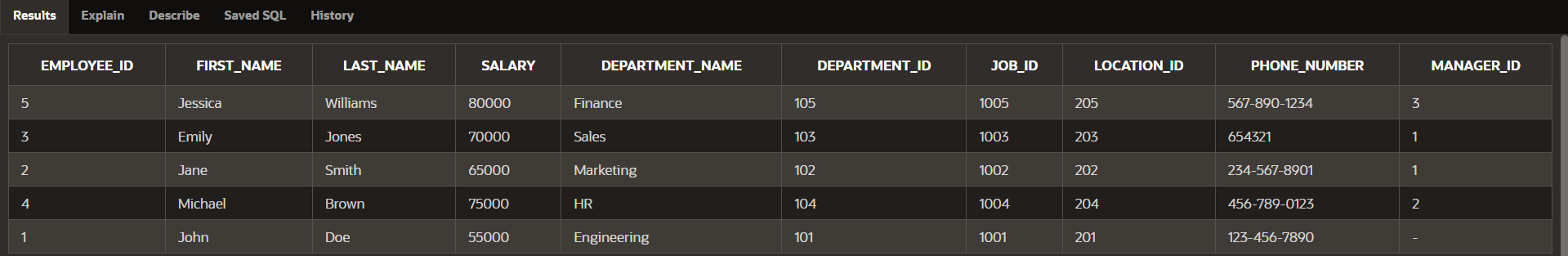
SELECT \*FROM COPY\_EMPLOYEZ



UPDATE copy\_employeZ

SET phone\_number = '654321',

WHERE last\_name = 'Jones'



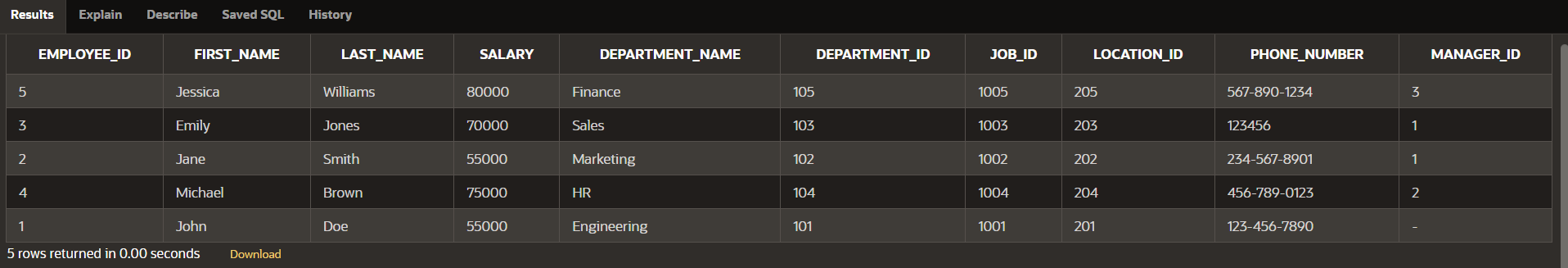
UPDATE copy\_employeZ

SET salary = (SELECT salary

FROM copy\_employeZ

WHERE employee\_id = 1)

WHERE employee\_id = 2;



UPDATE copy\_employeZ

SET salary = (SELECT salary

FROM copy\_employeZ

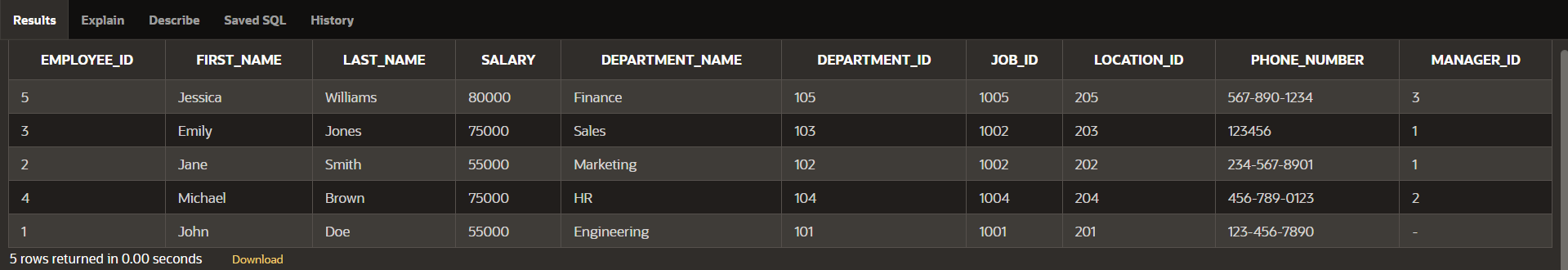
WHERE employee\_id = 4),

job\_id = (SELECT job\_id

FROM copy\_employeZ

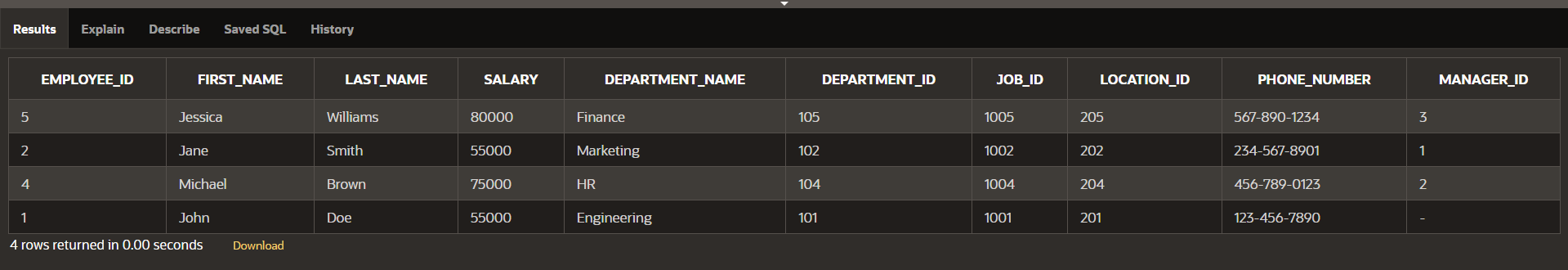
WHERE employee\_id = 2)

WHERE employee\_id = 3;



DELETE from copy\_employeZ

WHERE employee\_id = 3;



MERGE INTO copy\_emp c USING employees e

ON (c.employee\_id = e.employee\_id)

WHEN MATCHED THEN UPDATE

SET

c.last\_name = e.last\_name,

c.department\_id = e.department\_id

WHEN NOT MATCHED THEN INSERT

VALUES (e.employee\_id, e.last\_name, e.department\_id);

12\_3

INSERT INTO my\_employees

(hire\_date, first\_name, last\_name)

VALUES

(DEFAULT, 'Angelina', 'Wright');

INSERT INTO my\_employees

(first\_name, last\_name)

VALUES

('Angelina', 'Wright');

UPDATE my\_employees

SET hire\_date = DEFAULT

WHERE last\_name = 'Wright';

