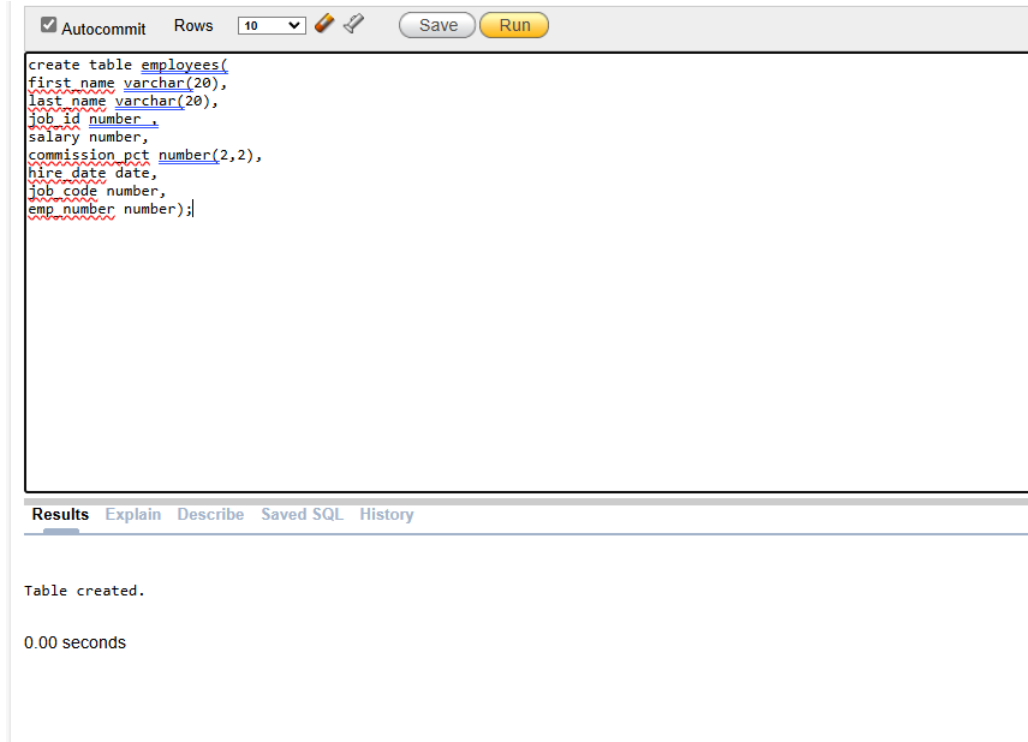


DBMS

EX-3: Writing basic SQL select statements



The screenshot shows a SQL IDE interface. At the top, there is a toolbar with a checked 'Autocommit' checkbox, a 'Rows' dropdown set to '10', and 'Save' and 'Run' buttons. The main text area contains the following SQL code:

```
create table employees(  
first_name varchar(20),  
last_name varchar(20),  
job_id number,  
salary number,  
commission_pct number(2,2),  
hire_date date,  
job_code number,  
emp_number number);
```

Below the code editor, there is a tabbed interface with 'Results' selected. The results pane displays the message 'Table created.' and the execution time '0.00 seconds'.

1. Show the structure of departments the table. Select all the data from it.

231901001
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☒ Autocommit
 Rows

Save

Run

```
desc employees;
```

Results Explain Describe Saved SQL History

Object Type

TABLE



Object

EMPLOYEES

| Table | Column | Data Type | Length | Precision | Scale | Primary Key | Nullable | Default | Comment |
|-----------|----------------|-----------|--------|-----------|-------|-------------|----------|---------|---------|
| EMPLOYEES | FIRST_NAME | VARCHAR2 | 20 | - | - | - | ✓ | - | - |
| | LAST_NAME | VARCHAR2 | 20 | - | - | - | ✓ | - | - |
| | JOB_ID | VARCHAR2 | 5 | - | - | - | ✓ | - | - |
| | SALARY | NUMBER | 22 | - | - | - | ✓ | - | - |
| | COMMISSION_PCT | NUMBER | - | 2 | 2 | - | ✓ | - | - |
| | HIRE_DATE | DATE | 7 | - | - | - | ✓ | - | - |
| | JOB_CODE | NUMBER | 22 | - | - | - | ✓ | - | - |
| | EMP_NUMBER | NUMBER | 22 | - | - | - | ✓ | - | - |

1 - 8

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☒ Autocommit Rows 10   Save Run

```
select * from employees;
```

Results

Explain

Describe

Saved SQL

History



| FIRST_NAME | LAST_NAME | JOB_ID | SALARY | COMMISSION_PCT | HIRE_DATE | JOB_CODE | EMP_NUMBER |
|------------|-----------|--------|---------|----------------|------------|----------|------------|
| Ravi | Shankar | 3132 | 100000 | .32 | 12/12/2012 | 12 | 129 |
| Priya | Vishnu | 2421 | 100000 | .3 | 12/03/2023 | 43 | 921 |
| Lakshmi | Ganesh | 2413 | 1000000 | .23 | 02/03/2008 | 24 | 431 |
| Naveena | Bala | 3143 | 200000 | .21 | 12/08/2020 | 54 | 786 |
| Iniyaa | Paari | 4321 | 200000 | .23 | 10/07/2021 | 65 | 786 |

5 rows returned in 0.01 seconds [Download](#)

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2. Create a query to display the last name, job code, hire date, and employee number for each employee, with employee number appearing first.

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☒ Autocommit Rows  

```
select  emp_number,last_name, job_code , hire_date from employees;
```

Results Explain Describe Saved SQL History

| EMP_NUMBER | LAST_NAME | JOB_CODE | HIRE_DATE |
|------------|-----------|----------|------------|
| 129 | Shankar | 12 | 12/12/2012 |
| 921 | Vishnu | 43 | 12/03/2023 |
| 431 | Ganesh | 24 | 02/03/2008 |
| 786 | Bala | 54 | 12/08/2020 |
| 786 | Paari | 65 | 10/07/2021 |

5 rows returned in 0.00 seconds [Download](#)

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3. Provide an alias STARTDATE for the hire date.

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```
select hire_date as startdate from employees;
```

Results Explain Describe Saved SQL History

| STARTDATE |
|------------|
| 12/12/2012 |
| 12/03/2023 |
| 02/03/2008 |
| 12/08/2020 |
| 10/07/2021 |

5 rows returned in 0.00 seconds

[Download](#)

4. Create a query to display unique job codes from the employee table.

```
select distinct job_code from employees;
```

Results Explain Describe Saved SQL History

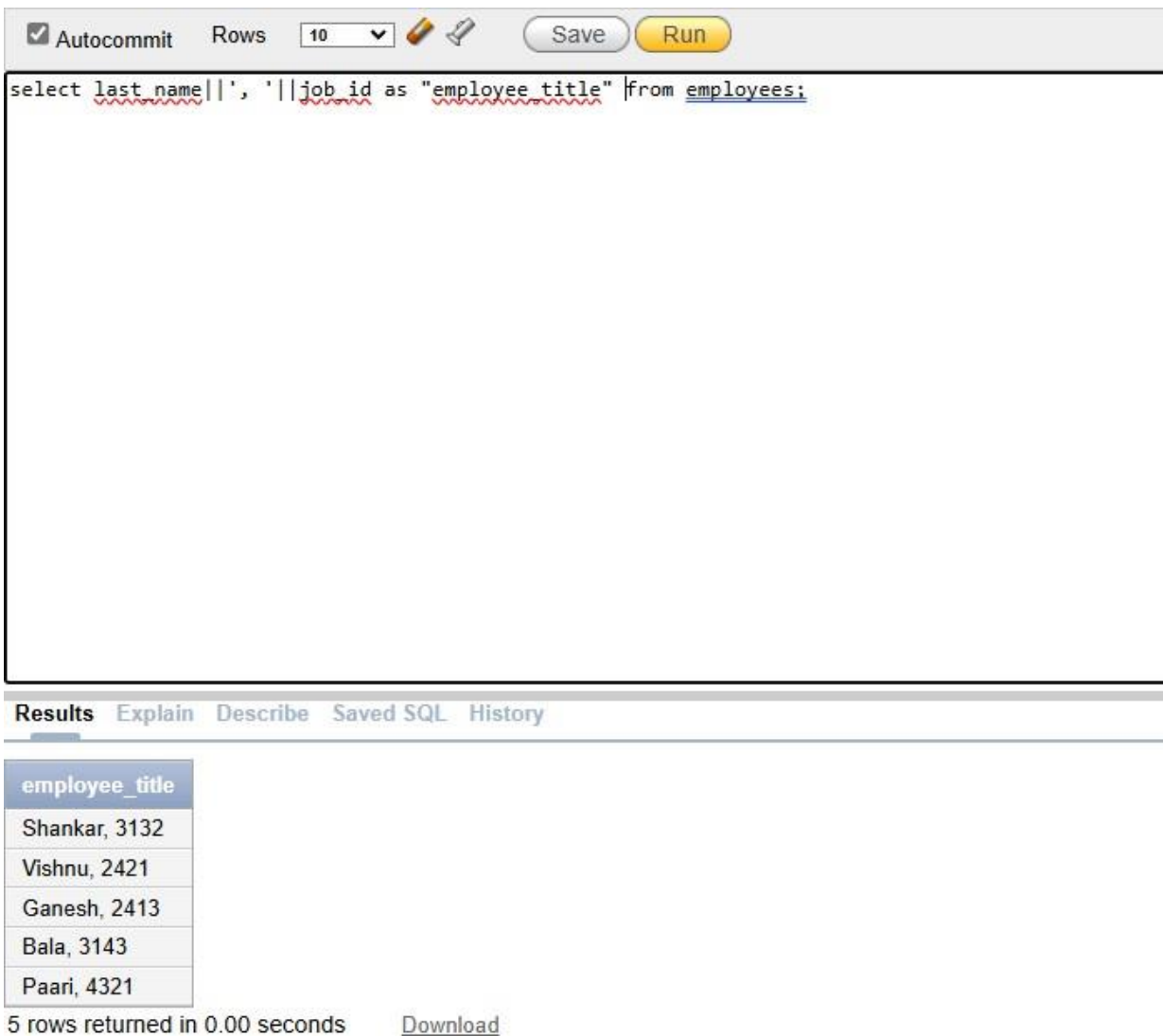
| JOB_CODE |
|----------|
| 43 |
| 54 |
| 24 |
| 12 |
| 65 |

5 rows returned in 0.00 seconds

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5. Display the last name concatenated with the job ID , separated by a comma and space, and name the column EMPLOYEE and TITLE.



The screenshot shows a SQL query editor interface. At the top, there is a toolbar with a checked 'Autocommit' checkbox, a 'Rows' dropdown set to '10', and 'Save' and 'Run' buttons. The query text area contains the following SQL statement:

```
select last name||', '||job_id as "employee title" from employees;
```

Below the query editor is a 'Results' tab. The results are displayed in a table with the following data:

| employee_title |
|----------------|
| Shankar, 3132 |
| Vishnu, 2421 |
| Ganesh, 2413 |
| Bala, 3143 |
| Paari, 4321 |

At the bottom of the results window, it states '5 rows returned in 0.00 seconds' and provides a 'Download' link.

6. Create a query to display all the data from the employees table. Separate each column by a comma. Name the column THE_OUTPUT.

231901001
AAKASH S

```
select emp_id||', '||first_name ||', '||last_name||', '||job_code||', '||hire_date||', '||salary as "The
```

Results Explain Describe Saved SQL History

| The_Output | | | | | | |
|------------|---|---------|---|----------|---|----|
| 45 | , | Jay | , | Ganesh | , | 54 |
| 09/18/2016 | , | 35000 | | | | |
| 35 | , | Kartick | , | R | , | 54 |
| 04/21/2015 | , | 55000 | | | | |
| 31 | , | Mohamad | , | Arsath | , | 32 |
| 01/05/2015 | , | 72000 | | | | |
| 20 | , | Janit | , | B | , | 6 |
| 04/20/2015 | , | 85000 | | | | |
| 59 | , | Arun | , | Bharathi | , | 7 |
| 07/07/2017 | , | 25000 | | | | |

5 rows returned in 0.01 seconds [Download](#)