EditorEx.No.: 5

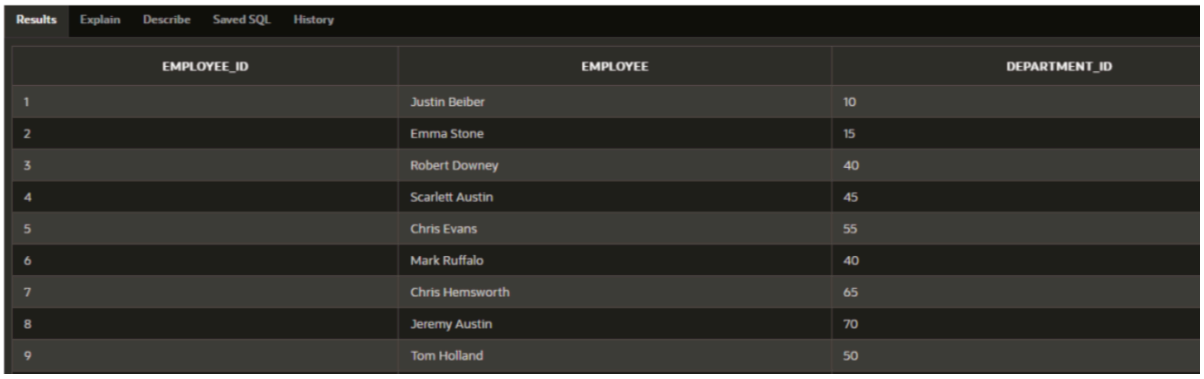
Date: 23/08/2024 **CREATING VIEWS**

1) Create a view called EMPLOYEE_VU based on the employee numbers, employee names and department numbers from the EMPLOYEES table. Change the heading for the employee name to EMPLOYEE.

```
create view EMPLOYEE_VU as
select employee_id , first_name || ' ' || last_name as
"EMPLOYEE", department_id from employees;
```

2) Display the contents of the EMPLOYEES_VU view.

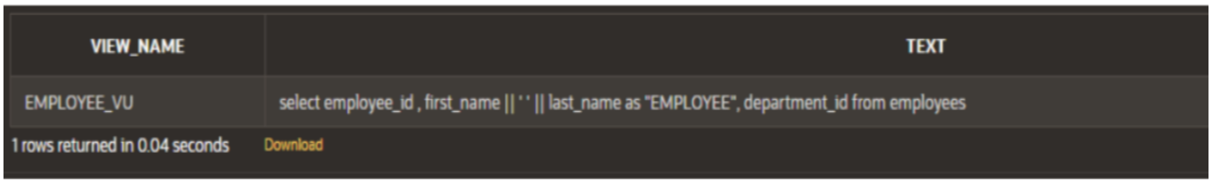
```
select * from EMPLOYEE_VU;
```



EMPLOYEE_ID	EMPLOYEE	DEPARTMENT_ID
1	Justin Beiber	10
2	Emma Stone	15
3	Robert Downey	40
4	Scarlett Austin	45
5	Chris Evans	55
6	Mark Ruffalo	40
7	Chris Hemsworth	65
8	Jeremy Austin	70
9	Tom Holland	50

3) Select the view name and text from the USER_VIEWS data dictionary views.

```
select VIEW_NAME, TEXT
from USER_VIEWS
where VIEW_NAME = 'EMPLOYEE_VU';
```



VIEW_NAME	TEXT
EMPLOYEE_VU	select employee_id , first_name || ' ' || last_name as "EMPLOYEE", department_id from employees

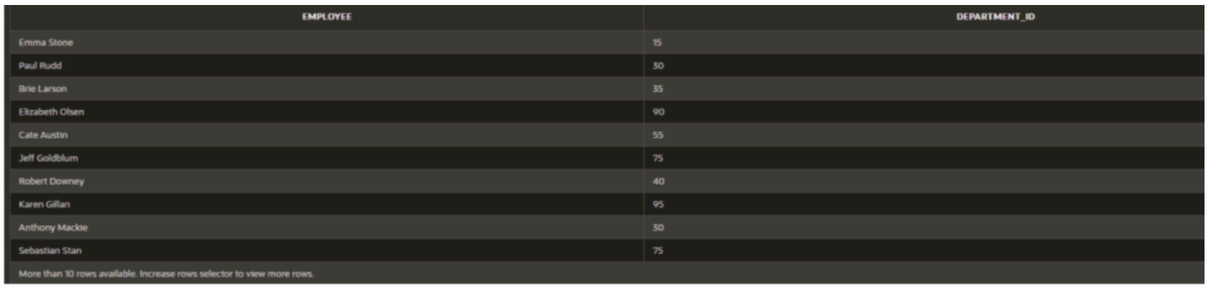
1 rows returned in 0.04 seconds

4) Using your EMPLOYEES_VU view, enter a query to display all employees names and Department.

```
SELECT employee, department_id



FROM EMPLOYEE_VU;
```

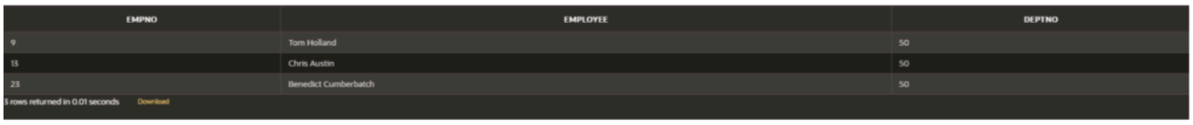


EMPLOYEE	DEPARTMENT_ID
Emma Stone	15
Paul Rudd	30
Brie Larson	35
Elizabeth Olsen	90
Cate Austin	55
Jeff Goldblum	75
Robert Downey	40
Karen Gillan	95
Anthony Mackie	30
Sebastian Stan	75

More than 10 rows available. Increase rows selector to view more rows.

5) Create a view named DEPT50 that contains the employee number, employee last names and department numbers for all employees in department 50.Label the view columns EMPNO, EMPLOYEE and DEPTNO. Do not allow an employee to be reassigned to another department through the view.

```
CREATE VIEW DEPT50 AS
SELECT employee_id AS EMPNO,
     employee AS EMPLOYEE,
     department_id AS DEPTNO
FROM EMPLOYEE_VU
WHERE department_id = 50
WITH READ ONLY;
```

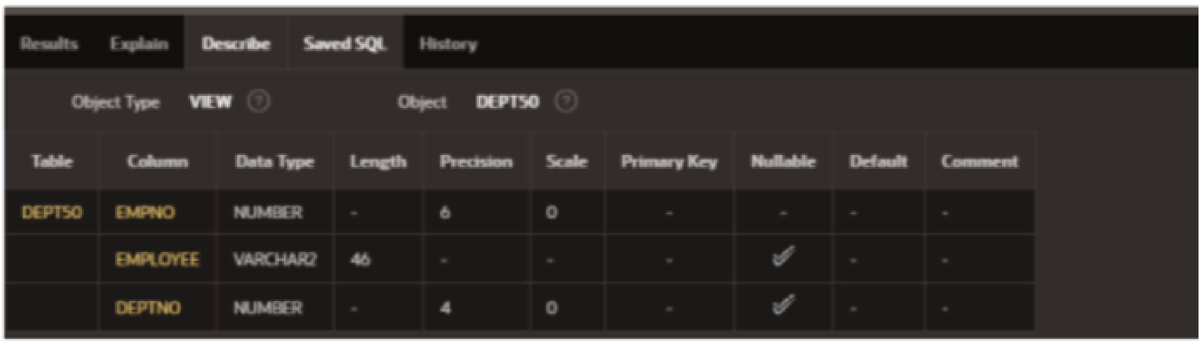


EMPNO	EMPLOYEE	DEPTNO
9	Tom Holland	50
13	Chris Austin	50
23	Benedict Cumberbatch	50

3 rows returned in 0.01 seconds   Download

6) Display the structure and contents of the DEPT50 view.

```
Desc dept50;
```



Object Type VIEW   Object DEPT50

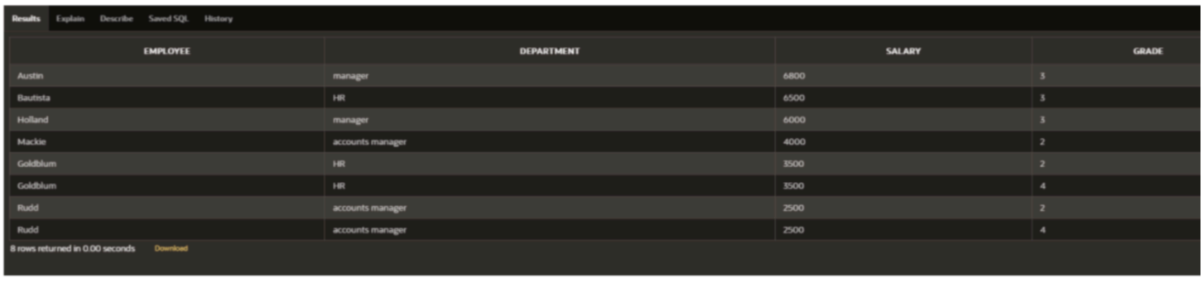
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPT50	EMPNO	NUMBER	-	6	0	-	-	-	-
	EMPLOYEE	VARCHAR2	46	-	-	-	✓	-	-
	DEPTNO	NUMBER	-	4	0	-	✓	-	-

7) Attempt to reassign Matos to department 80.

```
UPDATE EMPLOYEES
SET department_id = 80
WHERE first_name = 'Matos';
```

8) Create a view called SALARY_VU based on the employee last names, department names, salaries, and salary grades for all employees. Use the Employees, DEPARTMENTS and JOB_GRADE tables. Label the column Employee, Department, salary, and Grade respectively.

```
CREATE VIEW SALARY_VU AS
SELECT e.last_name AS Employee,
       d.dept_name AS Department,
       e.salary AS Salary,
       j.grade_level AS Grade
FROM EMPLOYEES e
JOIN DEPARTMENT d
ON e.department_id = d.dept_id
JOIN JOB_GRADE j
ON e.salary BETWEEN j.lowest_sal AND j.highest_sal;
```



EMPLOYEE	DEPARTMENT	SALARY	GRADE
Austin	manager	6800	3
Bautista	HR	6500	3
Holland	manager	6000	3
Mackie	accounts manager	4000	2
Goldblum	HR	3500	2
Goldblum	HR	3500	4
Rudd	accounts manager	2500	2
Rudd	accounts manager	2500	4

8 rows returned in 0.00 seconds Download