**SQL DML (FROM 3.3)**

**FETCH THE VALUES FROM A CURSOR:**

DECLARE

CURSOR c\_emp\_cursor IS

SELECT EmployeeID, LastName FROM employ

WHERE DepartmentID = 103;

v\_empno employ.EmployeeID%TYPE;

v\_lname employ.LastName%TYPE;

BEGIN

OPEN c\_emp\_cursor;

LOOP

FETCH c\_emp\_cursor INTO v\_empno, v\_lname;

EXIT WHEN c\_emp\_cursor%NOTFOUND;

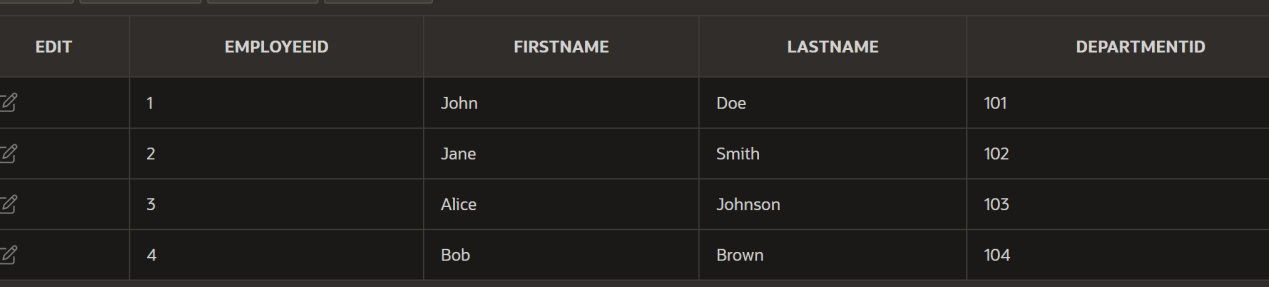
DBMS\_OUTPUT.PUT\_LINE (v\_empno || ' ' || v\_lname);

END LOOP;

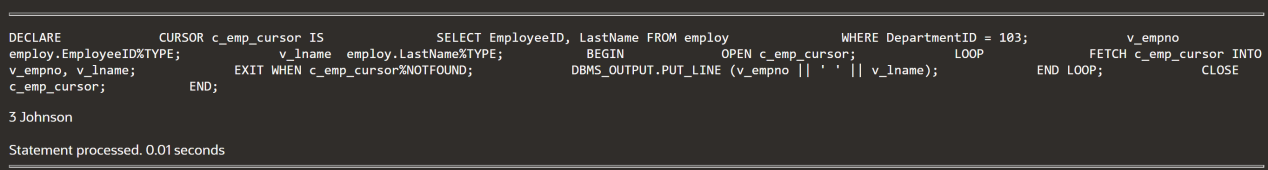
CLOSE c\_emp\_cursor;

END;

**TABLE:**



**OUTPUT:**



**FETCH VALUES FROM A RECORD:**

DECLARE

CURSOR c\_emp\_cursor IS

SELECT EmployeeID, LastName FROM employ

WHERE DepartmentID = 101;

v\_emp\_record c\_emp\_cursor%ROWTYPE;

BEGIN

OPEN c\_emp\_cursor;

LOOP

FETCH c\_emp\_cursor INTO v\_emp\_record;

EXIT WHEN c\_emp\_cursor%NOTFOUND;

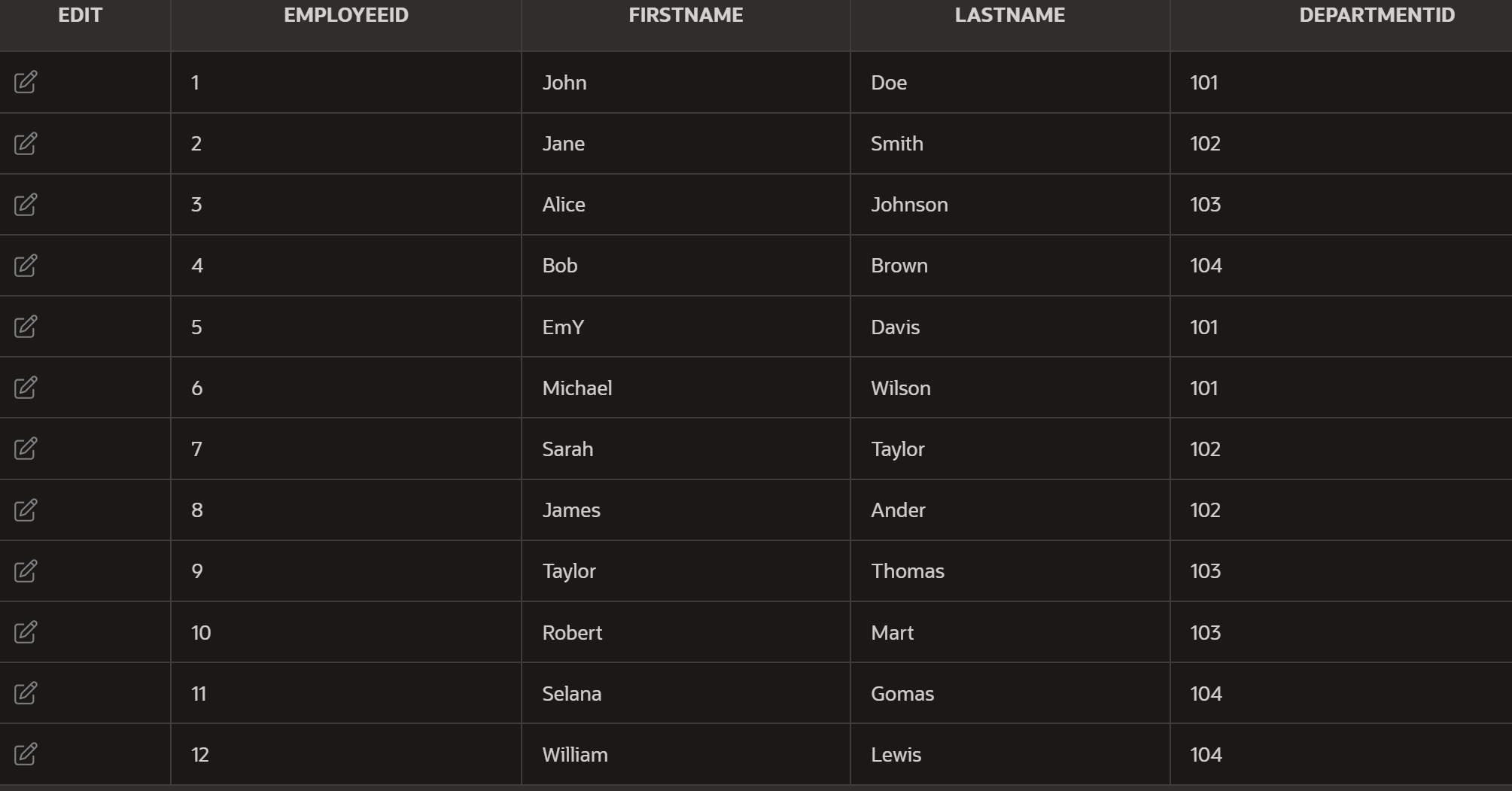
DBMS\_OUTPUT.PUT\_LINE (v\_emp\_record.EmployeeID || ' ' ||v\_emp\_record.LastName);

END LOOP;

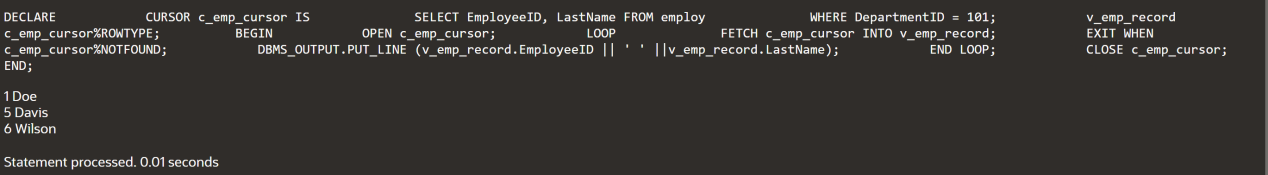
CLOSE c\_emp\_cursor;

END;

**TABLE:**



**OUTPUT:**



**USING %ROWCOUNT AND %NOTFOUND ATTRIBUTES:**

DECLARE

CURSOR c\_emp\_cursor IS

SELECT EmployeeID, LastName FROM employ

WHERE DepartmentID =103;

v\_emp\_record c\_emp\_cursor%ROWTYPE;

BEGIN

OPEN c\_emp\_cursor;

LOOP

FETCH c\_emp\_cursor INTO v\_emp\_record;

EXIT WHEN c\_emp\_cursor%ROWCOUNT > 10 OR c\_emp\_cursor%NOTFOUND;

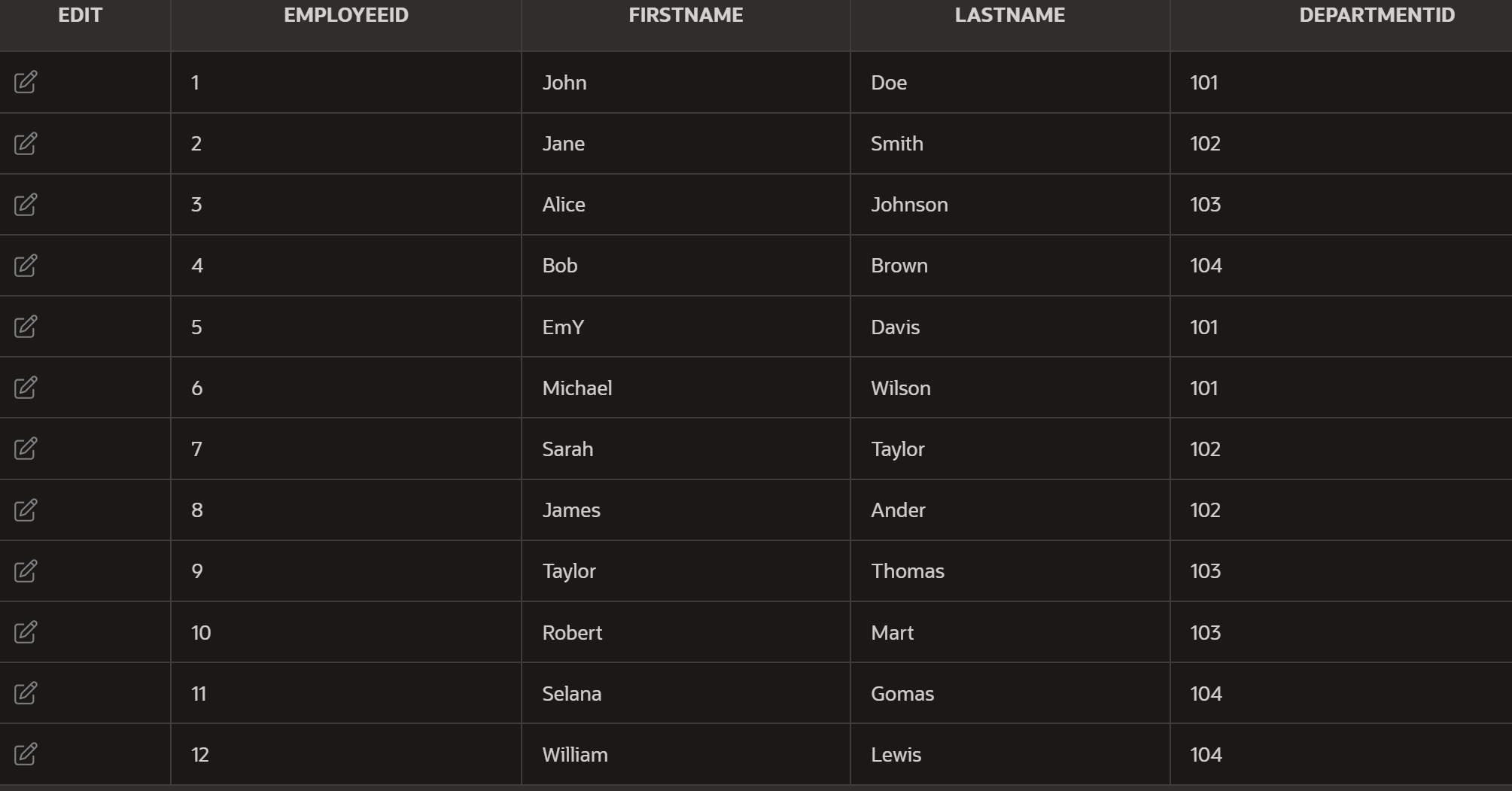
DBMS\_OUTPUT.PUT\_LINE (v\_emp\_record.EmployeeID || ' ' ||

v\_emp\_record.LastName);

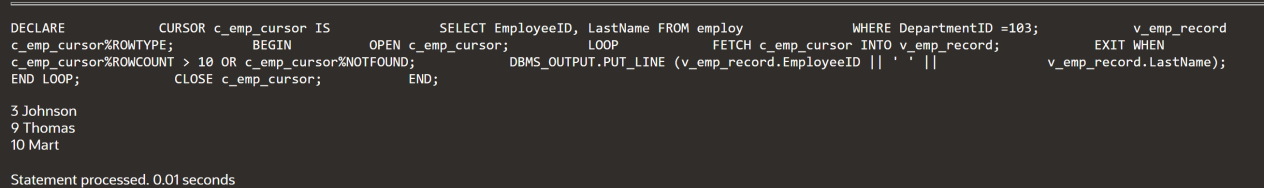
END LOOP;

CLOSE c\_emp\_cursor;

END;

**TABLE:**

**OUTPUT:**



**USING A CURSOR FOR LOOP:**

DECLARE

CURSOR c\_emp\_cursor IS

SELECT EmployeeID, LastName FROM employ

WHERE DepartmentID = 101;

BEGIN

FOR emp\_record IN c\_emp\_cursor

LOOP

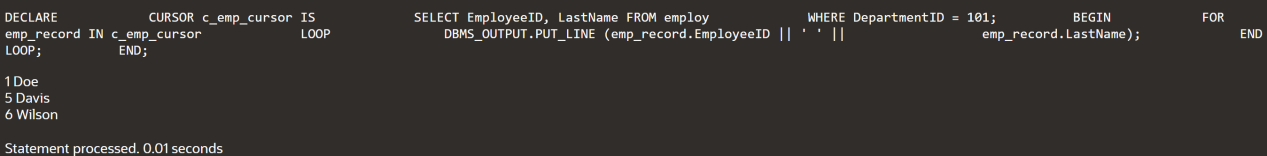
DBMS\_OUTPUT.PUT\_LINE (emp\_record.EmployeeID || ' ' ||

emp\_record.LastName);

END LOOP;

END;

**OUTPUT:**



**USING A CURSOR FOR LOOP WITH SUBQUERIES:**

DECLARE

CURSOR c\_emp\_cursor IS

SELECT EmployeeID, LastName FROM employ

WHERE DepartmentID = 104;

BEGIN

FOR emp\_record IN (SELECT EmployeeID, LastName FROM

employ WHERE DepartmentID = 104)

LOOP

DBMS\_OUTPUT.PUT\_LINE (emp\_record.EmployeeID|| ' ' ||

emp\_record.LastName);

END LOOP;

END;

**OUTPUT:**

