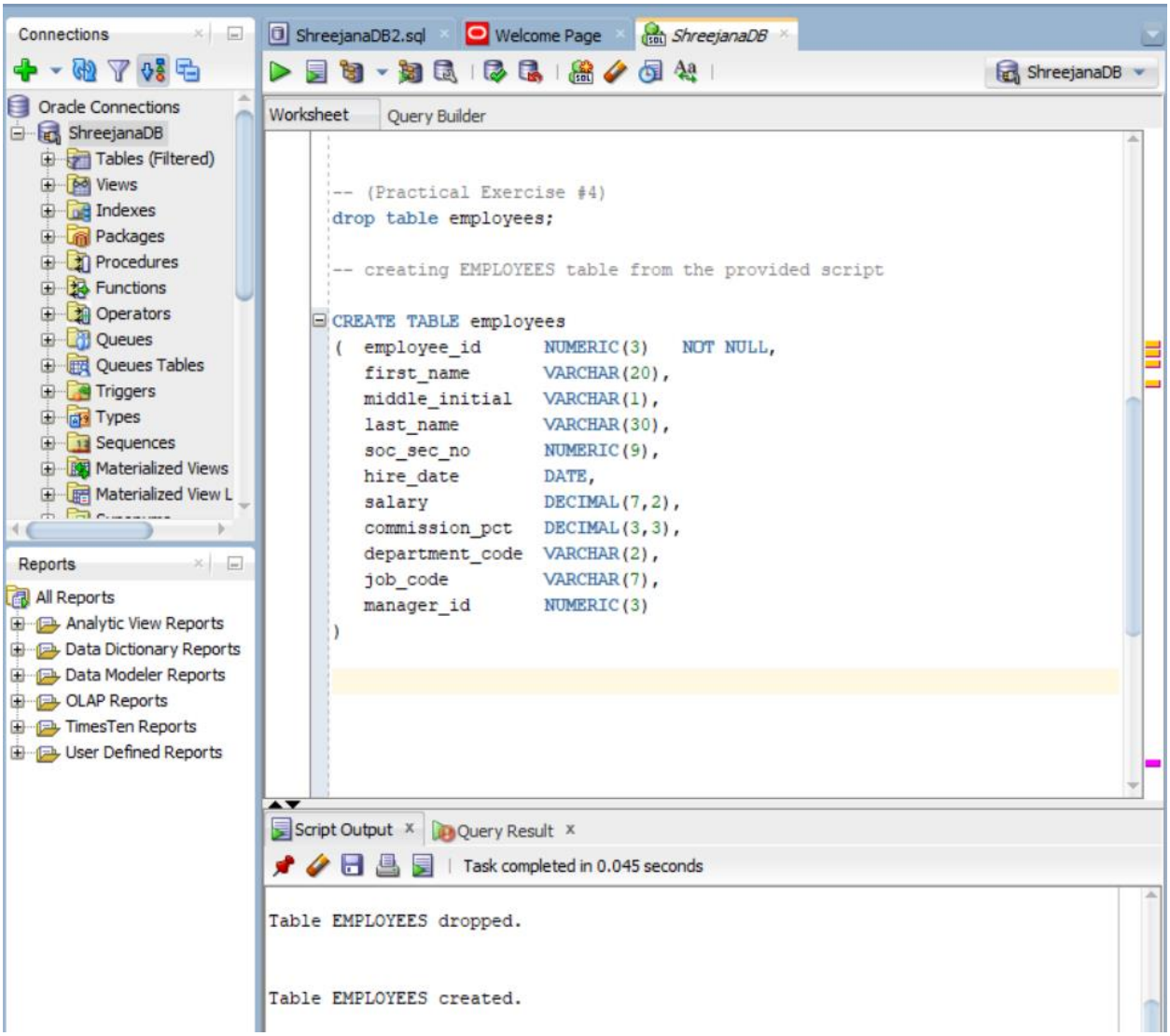
Database Programming

Practical Exercise #4

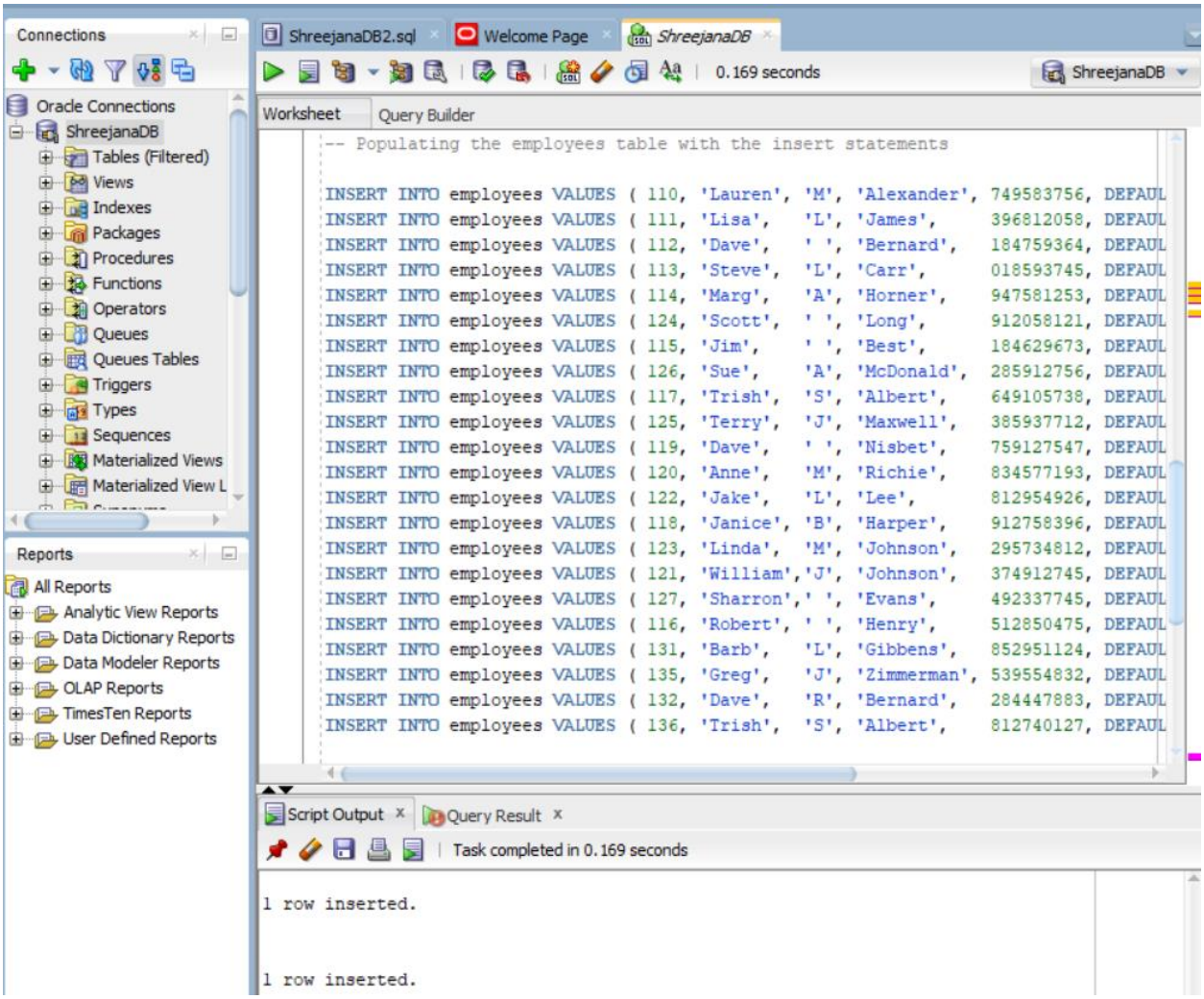
Student Name : Shreejana Shrestha

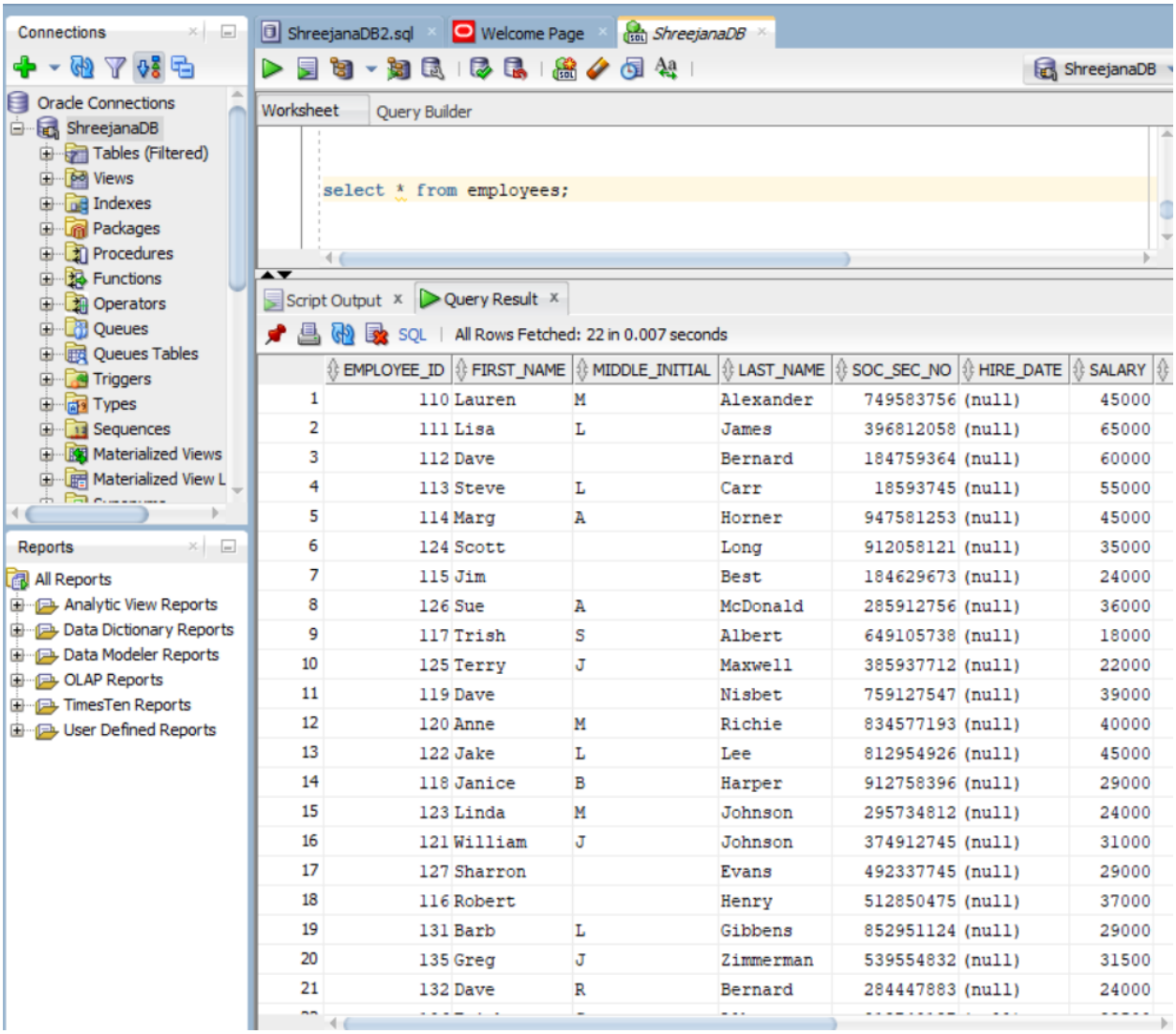
Student Id : C0930321

Table creation



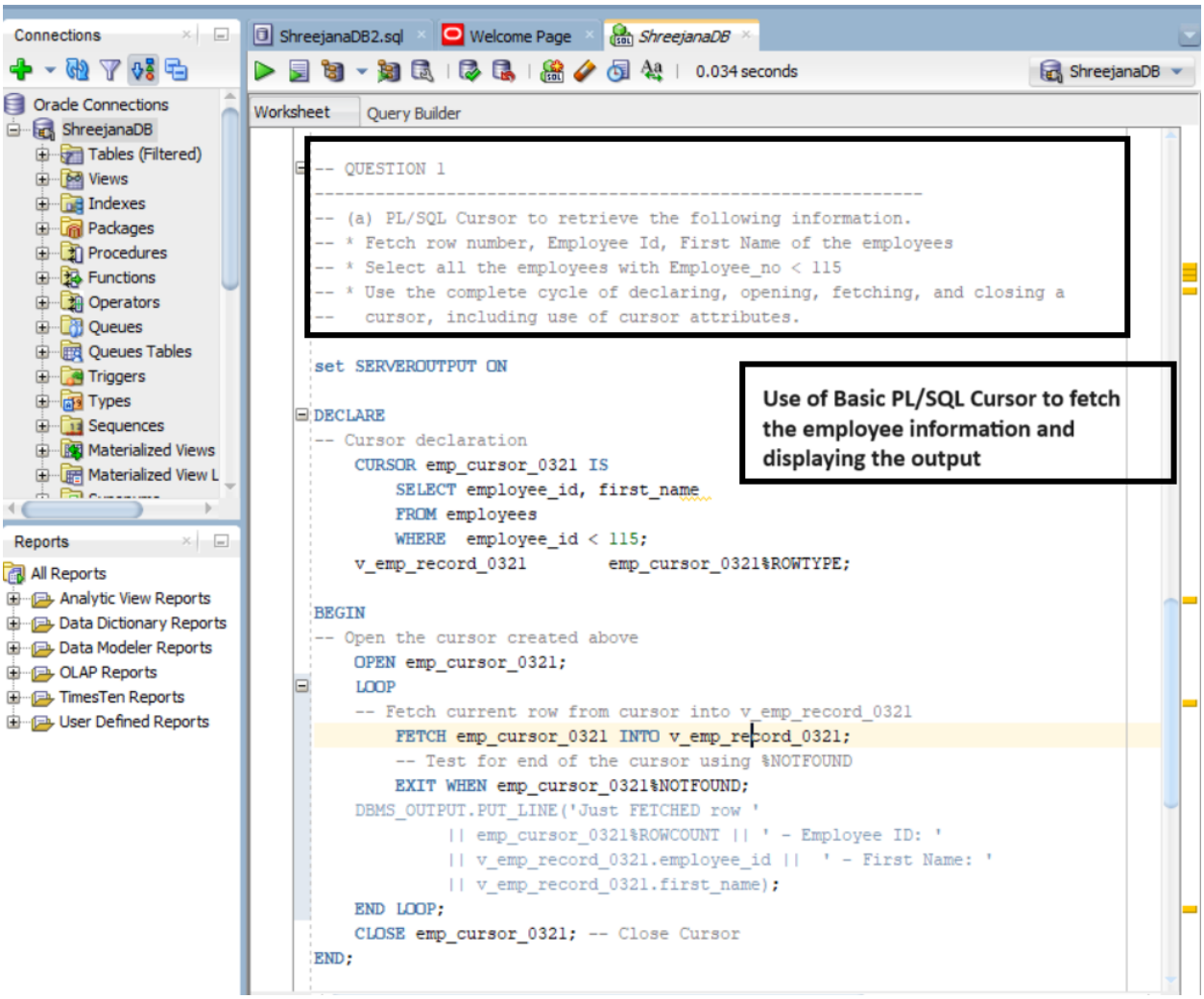
Insertion of data in the employee table



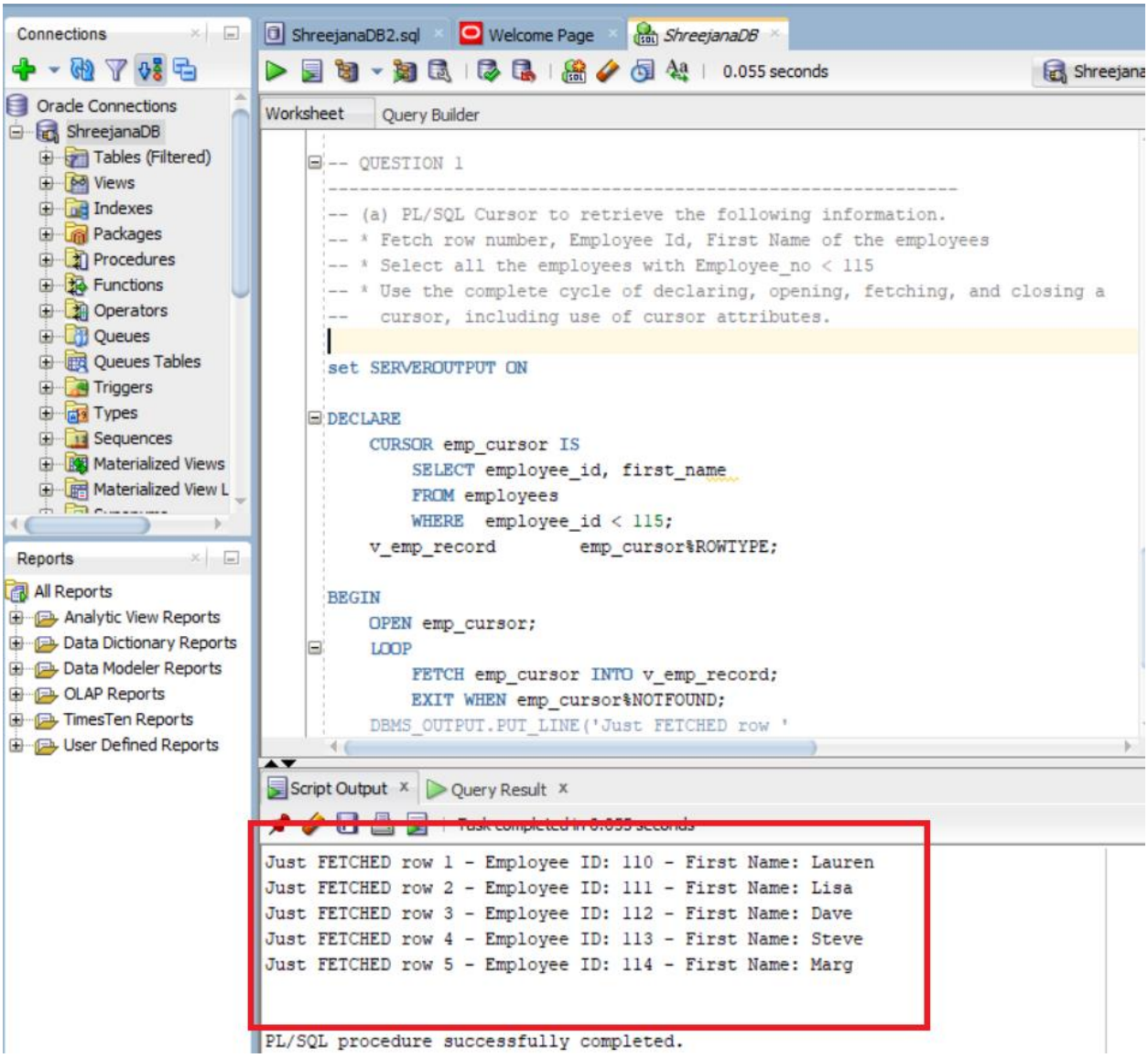


	EMPLOYEE_ID	FIRST_NAME	MIDDLE_INITIAL	LAST_NAME	SOC_SEC_NO	HIRE_DATE	SALARY
1	110	Lauren	M	Alexander	749583756	(null)	45000
2	111	Lisa	L	James	396812058	(null)	65000
3	112	Dave		Bernard	184759364	(null)	60000
4	113	Steve	L	Carr	18593745	(null)	55000
5	114	Marg	A	Horner	947581253	(null)	45000
6	124	Scott		Long	912058121	(null)	35000
7	115	Jim		Best	184629673	(null)	24000
8	126	Sue	A	McDonald	285912756	(null)	36000
9	117	Trish	S	Albert	649105738	(null)	18000
10	125	Terry	J	Maxwell	385937712	(null)	22000
11	119	Dave		Nisbet	759127547	(null)	39000
12	120	Anne	M	Richie	834577193	(null)	40000
13	122	Jake	L	Lee	812954926	(null)	45000
14	118	Janice	B	Harper	912758396	(null)	29000
15	123	Linda	M	Johnson	295734812	(null)	24000
16	121	William	J	Johnson	374912745	(null)	31000
17	127	Sharron		Evans	492337745	(null)	29000
18	116	Robert		Henry	512850475	(null)	37000
19	131	Barb	L	Gibbens	852951124	(null)	29000
20	135	Greg	J	Zimmerman	539554832	(null)	31500
21	132	Dave	R	Bernard	284447883	(null)	24000

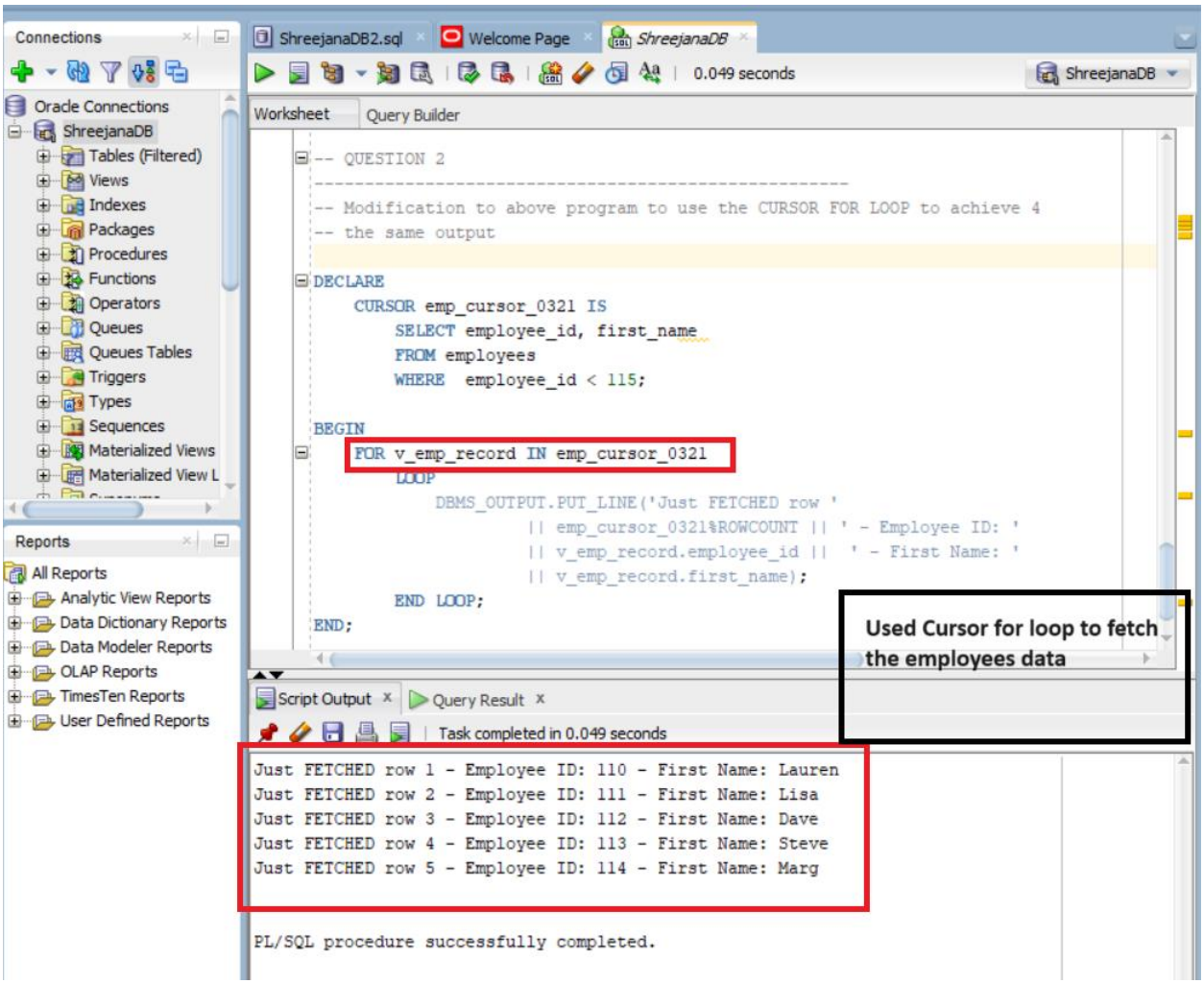
QUESTION 1


Connections
Oracle Connections
ShreejanaDB
Tables (Filtered)
Views
Indexes
Packages
Procedures
Functions
Operators
Queues
Queues Tables
Triggers
Types
Sequences
Materialized Views
Reports
All Reports
Analytic View Reports
Data Dictionary Reports
Data Modeler Reports
OLAP Reports
TimesTen Reports
User Defined Reports
ShreejanaDB2.sql
Welcome Page
ShreejanaDB
0.034 seconds
Worksheet
Query Builder
-- QUESTION 1
-- (a) PL/SQL Cursor to retrieve the following information.
-- * Fetch row number, Employee Id, First Name of the employees
-- * Select all the employees with Employee_no < 115
-- * Use the complete cycle of declaring, opening, fetching, and closing a
-- cursor, including use of cursor attributes.
set SERVEROUTPUT ON
DECLARE
-- Cursor declaration
CURSOR emp_cursor_0321 IS
SELECT employee_id, first_name
FROM employees
WHERE employee_id < 115;
v_emp_record_0321 emp_cursor_0321%ROWTYPE;
BEGIN
-- Open the cursor created above
OPEN emp_cursor_0321;
LOOP
-- Fetch current row from cursor into v_emp_record_0321
FETCH emp_cursor_0321 INTO v_emp_record_0321;
-- Test for end of the cursor using %NOTFOUND
EXIT WHEN emp_cursor_0321%NOTFOUND;
DBMS_OUTPUT.PUT_LINE('Just FETCHED row '
|| emp_cursor_0321%ROWCOUNT || ' - Employee ID: '
|| v_emp_record_0321.employee_id || ' - First Name: '
|| v_emp_record_0321.first_name);
END LOOP;
CLOSE emp_cursor_0321; -- Close Cursor
END;
Use of Basic PL/SQL Cursor to fetch the employee information and displaying the output

output


Connections
Oracle Connections
ShreejanaDB
Tables (Filtered)
Views
Indexes
Packages
Procedures
Functions
Operators
Queues
Queues Tables
Triggers
Types
Sequences
Materialized Views
Reports
All Reports
Analytic View Reports
Data Dictionary Reports
Data Modeler Reports
OLAP Reports
TimesTen Reports
User Defined Reports
ShreejanaDB2.sql
Welcome Page
ShreejanaDB
0.055 seconds
Worksheet
Query Builder
-- QUESTION 1
-- (a) PL/SQL Cursor to retrieve the following information.
-- * Fetch row number, Employee Id, First Name of the employees
-- * Select all the employees with Employee_no < 115
-- * Use the complete cycle of declaring, opening, fetching, and closing a
-- cursor, including use of cursor attributes.
set SERVEROUTPUT ON
DECLARE
CURSOR emp_cursor IS
SELECT employee_id, first_name
FROM employees
WHERE employee_id < 115;
v_emp_record emp_cursor%ROWTYPE;
BEGIN
OPEN emp_cursor;
LOOP
FETCH emp_cursor INTO v_emp_record;
EXIT WHEN emp_cursor%NOTFOUND;
DBMS_OUTPUT.PUT_LINE('Just FETCHED row '
Script Output
Query Result
Just FETCHED row 1 - Employee ID: 110 - First Name: Lauren
Just FETCHED row 2 - Employee ID: 111 - First Name: Lisa
Just FETCHED row 3 - Employee ID: 112 - First Name: Dave
Just FETCHED row 4 - Employee ID: 113 - First Name: Steve
Just FETCHED row 5 - Employee ID: 114 - First Name: Marg
PL/SQL procedure successfully completed.

QUESTION 2


Connections
Oracle Connections
ShreejanaDB
Tables (Filtered)
Views
Indexes
Packages
Procedures
Functions
Operators
Queues
Queues Tables
Triggers
Types
Sequences
Materialized Views
Reports
All Reports
Analytic View Reports
Data Dictionary Reports
Data Modeler Reports
OLAP Reports
TimesTen Reports
User Defined Reports
ShreejanaDB2.sql
Welcome Page
ShreejanaDB
0.049 seconds
Worksheet
Query Builder
-- QUESTION 2
-- Modification to above program to use the CURSOR FOR LOOP to achieve 4
-- the same output
DECLARE
CURSOR emp_cursor_0321 IS
SELECT employee_id, first_name
FROM employees
WHERE employee_id < 115;
BEGIN
FOR v_emp_record IN emp_cursor_0321
LOOP
DBMS_OUTPUT.PUT_LINE('Just FETCHED row '
|| emp_cursor_0321%ROWCOUNT || ' - Employee ID: '
|| v_emp_record.employee_id || ' - First Name: '
|| v_emp_record.first_name);
END LOOP;
END;
Used Cursor for loop to fetch the employees data
Script Output
Query Result
Task completed in 0.049 seconds
Just FETCHED row 1 - Employee ID: 110 - First Name: Lauren
Just FETCHED row 2 - Employee ID: 111 - First Name: Lisa
Just FETCHED row 3 - Employee ID: 112 - First Name: Dave
Just FETCHED row 4 - Employee ID: 113 - First Name: Steve
Just FETCHED row 5 - Employee ID: 114 - First Name: Marg
PL/SQL procedure successfully completed.