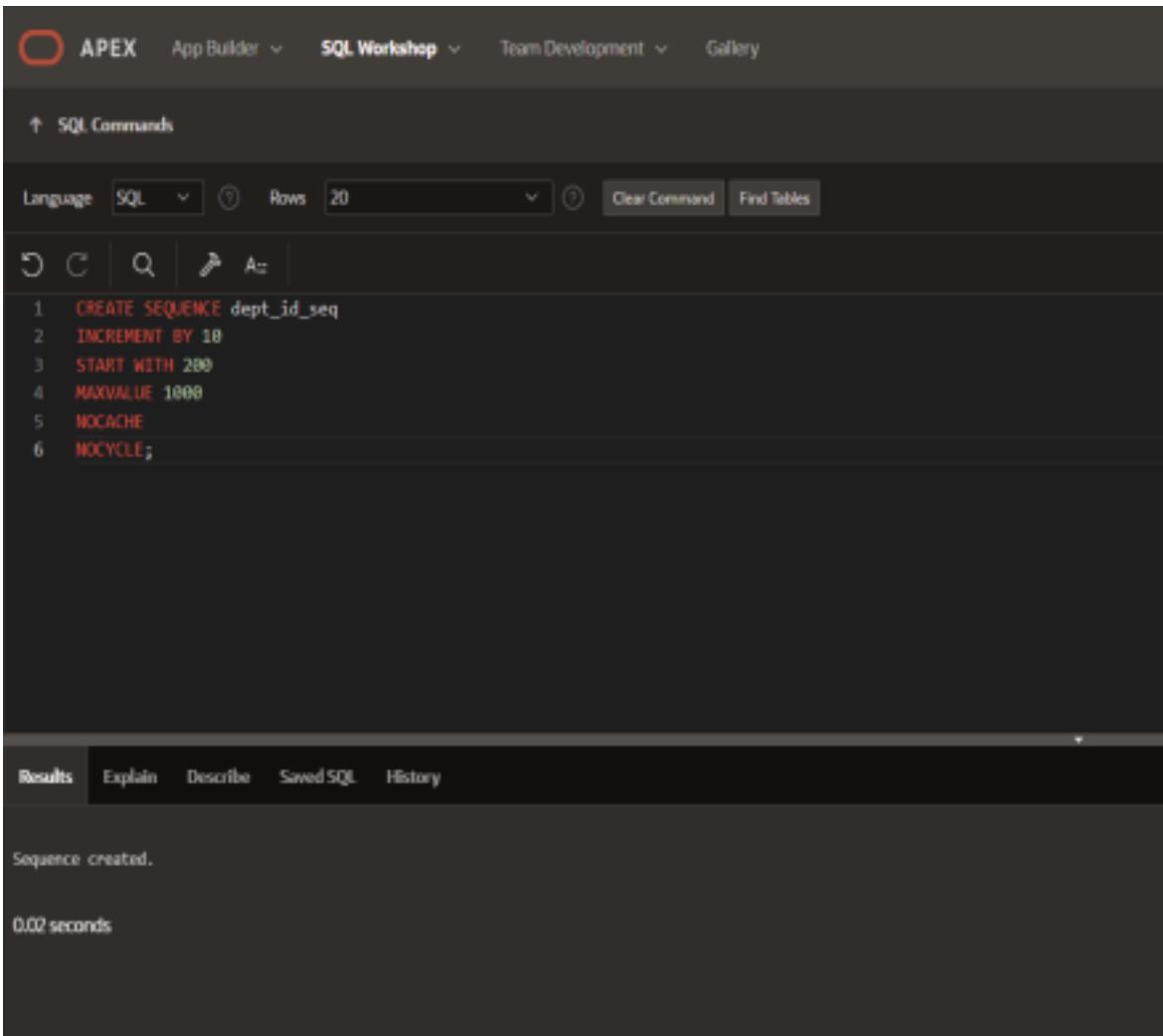


EXERCISE-14
OTHER DATABASE
OBJECTS

241801310 Department:
AI&DS

Name: VIDHYASHREE J
Register Number:

1. Create a sequence to be used with the primary key column of the DEPT table. The sequence should start at 200 and have a maximum value of 1000. Have your sequence increment by ten numbers. Name the sequence DEPT_ID_SEQ.



The screenshot shows the Oracle SQL Workshop interface. The top navigation bar includes APEX, App Builder, SQL Workshop (selected), Team Development, and Gallery. Below the bar, the SQL Commands section is active, indicated by the upward arrow icon. The language is set to SQL, and the results page displays 20 rows. The command entered is:

```
1 CREATE SEQUENCE dept_id_seq
2 INCREMENT BY 10
3 START WITH 200
4 MAXVALUE 1000
5 NOCACHE
6 NOCYCLE;
```

The Results tab is selected, showing the output: "Sequence created." and "0.02 seconds". Other tabs include Explain, Describe, Saved SQL, and History.

2. Write a query in a script to display the following information about your sequences: sequence name, maximum value, increment size, and last number.

The screenshot shows the Oracle SQL Developer interface. In the top-left corner, there's a toolbar with icons for file operations, search, and code navigation. Below the toolbar, the main area has tabs for 'SQL Commands' and 'Script'. The 'SQL Commands' tab is active, showing the following SQL code:

```
1 SELECT sequence_name,
2        max_value,
3        increment_by,
4        last_number
5   FROM user_sequences
6  WHERE sequence_name = 'DEPT_ID_SEQ';
```

Below the code, there's a 'Results' tab which is currently selected. It displays a table with four columns: SEQUENCE_NAME, MAX_VALUE, INCREMENT_BY, and LAST_NUMBER. The single row returned is:

SEQUENCE_NAME	MAX_VALUE	INCREMENT_BY	LAST_NUMBER
DEPT_ID_SEQ	1000	10	200

At the bottom of the results pane, it says '1 row(s) returned' and '0.00 seconds'.

3. Write a script to insert two rows into the DEPT table. Name your script lab12_3.sql. Be sure to use the sequence that you created for the ID column. Add two departments named Education and Administration. Confirm your additions. Run the commands in your script.

The screenshot shows the Oracle SQL Developer interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop' (which is currently selected), 'Team Development', and 'Gallery'. Below the navigation bar, the 'SQL Commands' tab is active. The SQL editor contains the following code:

```
1 INSERT INTO departments (department_id, department_name, location_id)
2 VALUES (dept_id_seq.NEXTVAL, 'Education', 1000);
```

At the bottom of the SQL editor, there's a 'Results' tab which is currently selected. It shows the message '1 row(s) inserted.' and '0.01 seconds'.

The screenshot displays two separate sessions in the Oracle SQL Workshop interface.

Session 1 (Top Window):

- Language: SQL
- Rows: 20
- SQL Command:

```
1  INSERT INTO departments (department_id, department_name, location_id)
2  VALUES (dept_id_seq.NEXTVAL, 'Administration', 1009);
```

Session 2 (Bottom Window):

- Language: SQL
- Rows: 20
- SQL Command:

```
1  SELECT * FROM departments
2  WHERE department_name IN ('Education', 'Manufacturing');
```

Results:

DEPARTMENT_ID	DEPARTMENT_NAME	LOCATION_ID
10	Administration	1009
300	Education	1008

4. Create a nonunique index on the foreign key column (DEPT_ID) in the EMP table.

The screenshot shows the Oracle SQL Workshop interface. In the top navigation bar, 'APEX' is selected. Below it, 'SQL Workshop' is active. The main area contains a SQL command window with the following content:

```
1 CREATE INDEX emp_dept_id_idx
2 ON employees(department_id);
```

Below the command window, there are several tabs: 'Results' (which is selected), 'Explain', 'Describe', 'Saved SQL', and 'History'. The results section displays the output of the executed command:

Index created.
0.04 seconds

5. Display the indexes and uniqueness that exist in the data dictionary for the EMP table.

The screenshot shows the Oracle SQL Workshop interface. In the top navigation bar, 'APEX' is selected. Below it, 'SQL Workshop' is active. The main area contains a SQL command window with the following content:

```
1 SELECT ix.index_name,
2       ix.column_name,
3       ix.column_position AS col_pos,
4       ix.uniqueness
5  FROM user_indexes ix
6  JOIN user_index_columns ixc
7    ON ix.index_name = ixc.index_name
8   AND ixc.table_name = 'EMPLOYEES';
```

Below the command window, there are several tabs: 'Results' (which is selected), 'Explain', 'Describe', 'Saved SQL', and 'History'. The results section displays the output of the executed command:

INDEX_NAME	COLUMN_NAME	COL_POS	UNIQUESS
BMP_DEPT_ID_IDX	DEPARTMENT_ID	1	NONUNIQUE
BMP_JOBNAME_IDX	JOB	1	UNIQUE

2 rows returned in 0.00 seconds - 0 rows deleted.