

## ◆ STEP 4: Procedure with Cursor: ShowApplications

```
CREATE OR REPLACE PROCEDURE ShowApplications IS

    CURSOR app_cursor IS

        SELECT a.application_id, s.name, a.status, a.approved_amount

        FROM Application a

        JOIN Student s ON a.student_id = s.student_id;

BEGIN

    FOR rec IN app_cursor LOOP

        DBMS_OUTPUT.PUT_LINE('AppID: ' || rec.application_id ||

            ' | Student: ' || rec.name ||

            ' | Status: ' || rec.status ||

            ' | Approved: ' || rec.approved_amount);

    END LOOP;

EXCEPTION

    WHEN OTHERS THEN

        DBMS_OUTPUT.PUT_LINE('Error displaying applications.');
```

END;

### 🧠 What It Does:

- Loops through all applications, joining with student names
- Prints application info using DBMS\_OUTPUT.PUT\_LINE
- Catches any errors and prints a message

### ✅ Why It Matters:

This kind of output is useful for **quick debugging** or **report previews** without needing an external GUI.

The screenshot displays the SQL Developer environment. The top window, titled 'Query Builder', contains the following PL/SQL script:

```
BEGIN
FOR rec IN app_cursor LOOP
    DBMS_OUTPUT.PUT_LINE('Application ID: ' || rec.application_id ||
                          ' | Student: ' || rec.student_name ||
                          ' | Status: ' || rec.status ||
                          ' | Approved Amount: ' || NVL(rec.approved_amount, 0));
END LOOP;
EXCEPTION
WHEN OTHERS THEN
    DBMS_OUTPUT.PUT_LINE('Error in ShowApplications procedure: ' || SQLERRM);
END;
/
```

The bottom window, titled 'Script Output', shows the results of the script execution:

```
1 row updated.

1 row inserted.

Function GETTOTALAID compiled

Procedure SHOWAPPLICATIONS compiled
```