PL/SQL Collections, Records & GOTO Demonstration

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Course: INSY 831 – Database Development with PL/SQL
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Date: November 2025

Objective

This project demonstrates how to use **PL/SQL composite data types** — *Collections* and *Records* — along with the **GOTO** statement for control flow.
It simulates a simple **department payroll and HR data management** example using Oracle PL/SQL.

Project Overview

The scripts in this repository illustrate the following PL/SQL concepts:

Concept	Example Used	Description
Associative Array	city_population	Stores city names and their population values using string keys
VARRAY	salary_varray_t	Holds up to 5 monthly salary values for one employee
Nested Table	bonus_nt_t	A dynamic list of bonuses that can become sparse when elements are deleted
Table-Based Record	%ROWTYPE	Fetches a complete row from the employees table
User-Defined Record	emp_rec_t	Custom record type containing a VARRAY of salaries
Cursor-Based Record	c_emp	Iterates through multiple employee rows using a cursor

Concept	Example Used	Description
GOTO Statement	error_label and finish	Demonstrates error handling and conditional jump
Collection of Records	emps	Stores multiple employee records in an associative array

How to Run the Project

1 **Enable Output**

In SQL*Plus or SQL Developer:

SET SERVEROUTPUT ON;