Assignment:

PLSQL (Part 1)

Overview:

This assignment has ten exercises, each for around 10-20 minutes. You are expected to complete the course/ reference reading before attempting the exercise. On completion of the exercises, you will be able to achieve the following objectives:

S.NO	Exercise	Description	Learning Objectives
1	Using Bind Variables	This exercise is about getting a data from user and querying the database.	Get data from the user and query the database
2	Updating database	This exercise is about manipulating data in database.	Manipulate data in database
3	Querying database.	This exercise is about querying particular data from the database.	Query particular data from database
4	Using Case Expression.	This exercise is about using conditions and updating the database.	Use case expressions
5	Using SQL queries.	This exercise is about using conditions on retrieving data.	Retrieve data from database
6	Using retrieval, update queries with conditions	This exercise is about retrieving data and based on certain condition update the database.	Retrieve and update data from database
7	Using Cursors	This exercise is about using cursors and specific rows.	Use cursors to fetch data
8	Using Functions	This exercise is about creating a function receiving a value and returning a value.	Create function
9	Using Functions	This exercise is about creating a function that receives a value, queries database, process result and return a value.	Create a function that receives, return, process and queries data into database

10	Using Functions	This exercise is about creating a function that consolidates particular set of data from database and returns in specific form.	Create a function to receive a data and to return the data where the function is called.

PLSQL (Part 1)

Exercise 1: Write a PL/SQL block to accept an employee number from the user and display whether it exists or not.
Recommended duration: *15 minutes*

Exercise 2: Write a PL/SQL block to interchange the salaries of employee 120 and 122.
Recommended duration: *15 minutes*

Exercise 3: Write a PL/SQL block to find out the name of the employee and name of the department for the employee Id 103.
Recommended duration: *10 minutes*

Exercise 4: Increase the salary of employee 115 based on the following conditions: If experience is more than 10 years, increase salary by 20% If experience is greater than 5 years, increase salary by 10% Otherwise 5% Case by Expression
Recommended duration: *10 minutes*

Exercise 5: Display missing employee IDs from employees table.
Recommended duration: *10 minutes*

Exercise 6: Change salary of employee 130 to the salary of the employee with first name 'Joe'. If Joe is not found then take average salary of all employees. If more than one employee with first name 'Joe' is found then take the least salary of the employees with first name Joe.
Recommended duration: *10 minutes*

Exercise 7: Write a PL/SQL block to display 5th and 10th employees in Employees table.
Recommended duration: *15 minutes*

Exercise 8: Create a function that takes department ID and returns the name of the manager of the department.
Recommended duration: *15 minutes*

Exercise 9: Create a function that takes employee ID and return the number of jobs done by the employee in the past.
Recommended duration: *10 minutes*

Exercise 10: Create a function that takes a manager ID and return the names of employees who report to this manager. The names must be returned as a string with comma separating names.
Recommended duration: *20 minutes*