

Lab : Use of Where clause and aggregate functions Oracle

Objective : Learn about where clause and aggregate functions in orcalte

Theory:

A subquery is a SELECT statement nested inside another statement such as SELECT, INSERT, UPDATE, or DELETE. Typically, you can use a subquery anywhere that you use an expression.

Initial Tables

EmployeeID	FirstName	LastName
1	John	Doe
2	Jane	Smith
3	Michael	Johnson

EmployeeID	Salary
1	50000
2	60000
3	55000

CODE 1

```
SELECT AVG(Salary) FROM (  
    SELECT Salary FROM Salaries  
) AS Subquery;
```

Output

```

+-----+
|  AVG(Salary)  |
+-----+
|  55000        |
+-----+

```

#### CODE 2

```

SELECT FirstName, LastName
FROM Employees
WHERE EmployeeID IN (SELECT EmployeeID FROM Salaries WHERE Salary > 55000);

```

#### OUTPUT

```

+-----+-----+
|  FirstName  | LastName  |
+-----+-----+
|  Jane       | Smith     |
+-----+-----+

```

#### CODE 3

```

SELECT FirstName, LastName
FROM Employees E
WHERE EXISTS (SELECT 1 FROM Salaries S WHERE S.EmployeeID = E.EmployeeID AND Salary > 60000);

```

```

+-----+-----+
|  FirstName  | LastName  |
+-----+-----+
|  Jane       | Smith     |
+-----+-----+

```

#### CODE 4

```

SELECT FirstName, LastName
FROM Employees
WHERE EmployeeID IN (SELECT EmployeeID FROM Salaries GROUP BY EmployeeID HAVING AVG(Salary)
> 55000);

```

Output

```
+-----+-----+
| FirstName | LastName |
+-----+-----+
| Jane      | Smith    |
+-----+-----+
```