**ProKarma Boot Camp – Data Bases**

Day2 - Instructions and Assignments

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**Instructions:**

**### Tasks:**

\*\*After setting up your local mysql database, import the Employee\_DB.sql file into your database. It is a sample Employee Database with some dummy data in it. <br>

Read about different keys in database tables and understand it’s significance.\*\*

**### SQL Exercises:**

\* E-R Diagram:

\* Create a E-R diagram model representation for the Employee Db.

\* Queries:

\* Write a query to Get a List of Employee who have a one part name.

\* Write a query to Get a List of Employee who have a three part name.

\* Write a query to get a list of Employee who have a First Middle Or last name as Ram, and not any thing else

\* Write a query which gives employee types in the organization.

\* Write a Query to get all employees where reminder of employee number by 10 is a power of two

\* Write a query to get all employees sorted by Service Type and Name within a given Center

**### Reading Activity:**

[Oracle Docs](https://docs.oracle.com/cd/A87860\_01/doc/java.817/a81358/05\_dev1.htm)

[Microsoft](https://technet.microsoft.com/en-us/library/bb264565(v=sql.90).aspx)

[Youtube](https://www.youtube.com/watch?v=AJdwp0fAHf4)

**Assignments:**

[\*] E-R Diagram model:

[\*] Queries:

- List of Employees who have one-part name:

SELECT Name

FROM tblemployees

WHERE LENGTH(Name) - LENGTH(REPLACE(Name, ' ', '')) +1 = 1;

- List of Employees who have three-part name:

SELECT Name

FROM tblemployees

WHERE LENGTH(Name) - LENGTH(REPLACE(Name, ' ', '')) +1 = 3;

- List of Employees who have First, Middle or Last name as ‘RAM’, and not anything else:

SELECT Name

FROM tblemployees

WHERE (Name = 'Ram') OR (Name REGEXP '[R][a][m][. ]') OR (Name REGEXP '[ ][R][a][m]');

-OR-

SELECT Name

FROM tblemployees

WHERE (Name LIKE 'RAM') OR

(Name REGEXP '^[R][A][M][ ]') OR

(Name REGEXP '^[ ][R][A][M][. ]') OR

(Name REGEXP '[ ][R][A][M]');

SELECT Name FROM tblemployees WHERE Name LIKE CONCAT('%','Ram','%');

- Write a query which gives employee types in the organization:

SELECT EmployeeType, Description

FROM tblemployeetypes;

SELECT DISTINCT EmployeeType

FROM tblemployees;

- Write a Query to get all employees where reminder of employee number by 10 is a power of two.

SELECT Name

FROM tblemployees

WHERE MOD(EmployeeNumber, 10) IN (2,4,8);

-OR-

SELECT Name

FROM tblemployees

WHERE EmployeeNumber % 10 IN (2,4,8);

- Write a Query to gel all employees sorted by Service Type and Name within a given Center

SELECT ServiceType, Name

FROM tblemployees

WHERE CentreCode = 21

ORDER BY ServiceType ASC, Name ASC;

* To obtain the CentreCode

SELECT DISTINCT CentreCode FROM tblemployees;