PLP DATABASE DESIGN AND PROGRAMMING CLASS PROJECT – Part One

In your report, clearly indicate the group number and full names of group members

Task one: Draw an entity relationship diagram for a HR database with the following requirements

The HR database has seven tables:

1. The employees table stores the data of employees.
2. The jobs table stores the job data including job title and salary range.
3. The departments table stores department data.
4. The dependents table stores the employee's dependents.
5. The locations table stores the location of the departments of the company.
6. The countries table stores the data of countries where the company is doing business.
7. The regions table stores the data of regions such as Asia, Europe, America, and the Middle East and Africa. The countries are grouped into regions.

Task two: Use SQL to create the HR database and the tables in the requirements showing the various constraints

Take screenshots of your SQL statements alongside the table view

Task three: SQL INSERT statement to populate the HR database as follows

Table	Rows
employees	40
dependents	30
departments	11
jobs	11
locations	7
countries	25
regions	4

Evidence of SQL statements to populate the tables alongside the results

Task four: use the SQL SELECT statement to query data from a single table.

i. use the SQL SELECT statement to get data from all the rows and columns in the employees table:
ii. use the SQL SELECT statement to get data from all the rows and columns in the dependents table:
iii. use the SQL SELECT statement to get data from all the rows and columns in the departments table:
iv. use the SQL SELECT statement to get data from all the rows and columns in the jobs table:
v. use the SQL SELECT statement to get data from all the rows and columns in the locations table:
vi. use the SQL SELECT statement to get data from all the rows and columns in the countries table:
vii. use the SQL SELECT statement to get data from all the rows and columns in the regions table:

Task five: use the SQL SELECT statement to query data from specific columns.

Select data from the employee id, first name, last name, and hire date of all rows in the employees table:

Task six: use the SQL SELECT statement to perform a simple calculation.

Use the SELECT statement to get the first name, last name, salary, and new salary as 5% of current salary:

Task seven: Use SQL ORDER BY clause to sort values in one column

i. Use SELECT statement to return the data from the employee id, first name, last name, hire date, and salary column of the employees table:
ii. Use the ORDER BY clause to sort employees by first names in alphabetical order:

Task eight: Use SQL ORDER BY clause to sort values in multiple columns

Use the ORDER BY clause to sort the employees by the first name in ascending order and the last name in descending order:

Task nine: Use SQL ORDER BY clause to sort values in a numeric column

Use the ORDER BY clause to sort employees by salary from high to low:

Task ten: Use SQL ORDER BY to sort by dates

Use the ORDER BY clause to sort the employees by values in the hire_date column from: