

## Human Resources Database

In the Human Resource (HR) records, each employee has an identification number, e-mail address, job identification code, salary, and manager. Some employees earn commissions in addition to their salary.

The company also tracks information about jobs within the organization. Each job has an identification code, job title, and a minimum and maximum salary range for the job. Some employees have been with the company for a long time and have held different positions within the company. When an employee resigns, the duration the employee was working, the job identification number, and the department are recorded.

The sample company is regionally diverse, so it tracks the locations of its warehouses and departments. Each employee is assigned to a department, and each department is identified either by a unique department number or a short name. Each department is associated with one location, and each location has a full address that includes the street name, postal code, city, state or province, and the country code. In places where the departments and warehouses are located, the company records details such as the country name, currency symbol, currency name, and the region where the country is located geographically.

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The company sells several products, such as computer hardware and software, music, clothing, and tools. The company maintains information about these products, such as product identification numbers, the category into which the product falls, order entry (OE), the weight group (for shipping purposes), the warranty period if applicable, the supplier, the availability status of the product, a list price, a minimum price at which a product will be sold, and a URL address for manufacturer information. Inventory information is also recorded for all products, including the warehouse where the product is available and the quantity on hand. Because products are sold worldwide, the company maintains the names of the products and their descriptions in several languages.

The company maintains warehouses in several locations to fulfill customer needs. Each warehouse has a warehouse identification number, name, facility description, and location identification number.

Customer information is also tracked. Each customer has an identification number. Customer records include customer name, street name, city or province, country, phone numbers (up to five phone numbers for each customer), and postal code. Some customers place orders through the Internet, so e-mail addresses are also recorded. Because of language differences among customers, the company records the native language and territory of each customer.

The company places a credit limit on its customers, to limit the number of products they can purchase at one time. Some customers have an account manager, and this information is also recorded.

When a customer places an order, the company tracks the date of the order, how the order was placed, the current status of the order, shipping mode, total amount of the order, and the sales representative who helped place the order. The sales representative may or may not be the same person as the account manager for a customer. If an order is placed over the Internet, no sales representative is recorded. In addition to order information, the company also tracks the number of items ordered, the unit price, and the products ordered.

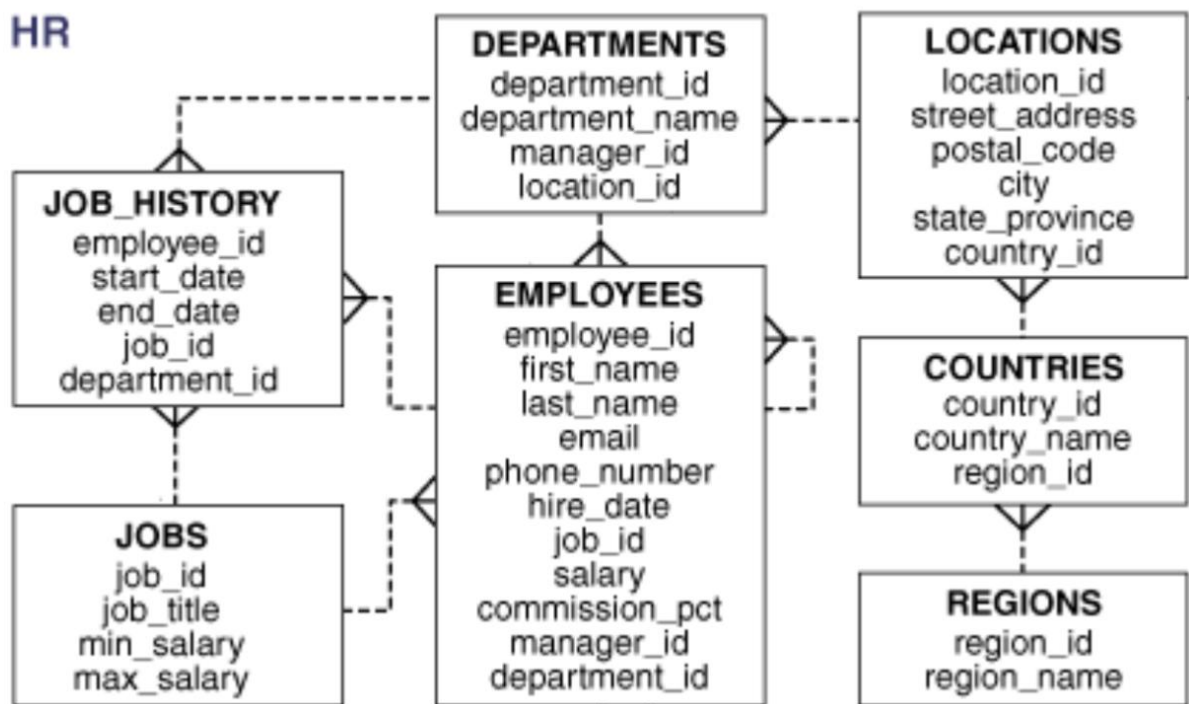
Task 1: Create a database called hr

Task 2: Create the following tables in the hr database and save the query in hr.sql

Task 3: Insert 5 records in each table, make sure you adhere to the constraints

Schema diagram

Instead of number datatype use int and instead of varchar2 use varchar



**Table 5–3 HR.COUNTRIES Table Description**

Column Name	Null?	Type
COUNTRY_ID	NOT NULL	CHAR (2)
COUNTRY_NAME		VARCHAR2 (40)
REGION_ID		NUMBER

**Table 5–4    HR.DEPARTMENTS Table Description**

Column Name	Null?	Type
DEPARTMENT_ID	NOT NULL	NUMBER (4)
DEPARTMENT_NAME	NOT NULL	VARCHAR2 (30)
MANAGER_ID		NUMBER (6)
LOCATION_ID		NUMBER (4)

**Table 5–5    HR.EMPLOYEES Table Description**

Column Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER (6)
FIRST_NAME		VARCHAR2 (20)
LAST_NAME	NOT NULL	VARCHAR2 (25)
EMAIL	NOT NULL	VARCHAR2 (20)
PHONE_NUMBER		VARCHAR2 (20)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2 (10)
SALARY		NUMBER (8, 2)
COMMISSION_PCT		NUMBER (2, 2)
MANAGER_ID		NUMBER (6)
DEPARTMENT_ID		NUMBER (4)

**Table 5–6 HR.JOBS Table Description**

Column Name	Null?	Type
JOB_ID	NOT NULL	VARCHAR2 (10)
JOB_TITLE	NOT NULL	VARCHAR2 (35)
MIN_SALARY		NUMBER (6)
MAX_SALARY		NUMBER (6)

**Table 5–7 HR.JOB\_HISTORY Table Description**

Column Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER (6)
START_DATE	NOT NULL	DATE
END_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2 (10)
DEPARTMENT_ID		NUMBER (4)

**Table 5–8 HR.LOCATIONS Table Description**

Column Name	Null?	Type
LOCATION_ID	NOT NULL	NUMBER (4)
STREET_ADDRESS		VARCHAR2 (40)
POSTAL_CODE		VARCHAR2 (12)
CITY	NOT NULL	VARCHAR2 (30)
STATE_PROVINCE		VARCHAR2 (25)
COUNTRY_ID		CHAR (2)

**Table 5–9 HR.REGIONS Table Description**

Column Name	Null?	Type
REGION_ID	NOT NULL	NUMBER
REGION_NAME		VARCHAR2 (25)

## COUNTRIES TABLE

COUNTRY_ID	Primary key of countries table.
COUNTRY_NAME	Country name
REGION_ID	Region ID for the country. Foreign key to region_id column in the departments table.

## DEPARTMENTS TABLE

DEPARTMENT_ID	Primary key column of departments table.
DEPARTMENT_NAME	A not null column that shows name of a department. Administration, Marketing, Purchasing, Human Resources, Shipping, IT, Executive, Public Relations, Sales, Finance, and Accounting.
MANAGER_ID	Manager_id of a department. Foreign key to employee_id column of employees table. The manager_id column of the employee table references this column.
LOCATION_ID	Location id where a department is located. Foreign key to location_id column of locations table.

## EMPLOYEES TABLE

EMPLOYEE_ID	Primary key of employees table.
FIRST_NAME	First name of the employee. A not null column.
LAST_NAME	Last name of the employee. A not null column.
EMAIL	Email id of the employee
PHONE_NUMBER	Phone number of the employee; includes country code and area code
HIRE_DATE	Date when the employee started on this job. A not null column.
JOB_ID	Current job of the employee; foreign key to job_id column of the jobs table. A not null column.
SALARY	Monthly salary of the employee. Must be greater than zero (enforced by constraint emp_salary_min)
COMMISSION_PCT	Commission percentage of the employee; Only employees in sales department eligible for commission percentage
MANAGER_ID	Manager id of the employee; has same domain as manager_id in departments table. Foreign key to employee_id column of employees table. (useful for reflexive joins and CONNECT BY query)
DEPARTMENT_ID	Department id where employee works; foreign key to department_id column of the departments table

## JOBS TABLE

JOB_ID	Primary key of jobs table.
JOB_TITLE	A not null column that shows job title, e.g. AD_VP, FI_ACCOUNTANT
MIN_SALARY	Minimum salary for a job title.
MAX_SALARY	Maximum salary for a job title

## JOB\_HISTORY TABLE

EMPLOYEE_ID	A not null column in the complex primary key employee_id+start_date. Foreign key to employee_id column of the employee table
START_DATE	A not null column in the complex primary key employee_id+start_date. Must be less than the end_date of the job_history table. (enforced by constraint jhist_date_interval)
END_DATE	Last day of the employee in this job role. A not null column. Must be

	greater than the start_date of the job_history table. (enforced by constraint jhist_date_interval)
JOB_ID	Job role in which the employee worked in the past; foreign key to job_id column in the jobs table. A not null column.
DEPARTMENT_ID	Department id in which the employee worked in the past; foreign key to department_id column in the departments table

## LOCATIONS TABLE

LOCATION_ID	Primary key of locations table
STREET_ADDRESS	Street address of an office, warehouse, or production site of a company. Contains building number and street name
POSTAL_CODE	Postal code of the location of an office, warehouse, or production site of a company.
CITY	A not null column that shows city where an office, warehouse, or production site of a company is located.
STATE_PROVINCE	State or Province where an office, warehouse, or production site of a company is located.
COUNTRY_ID	Country where an office, warehouse, or production site of a company is located. Foreign key to country_id column of the countries table.

## REGIONS TABLE

REGION_ID	Primary key
REGION_NAME	