Práctica 2 Base de Datos

Trabajo realizado por:

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a) SELECT first_name AS Nombre, last_name AS Apellidos, phone_number AS telefono
   FROM HR_employees
   WHERE job_id = 'IT_PROG';   //5 consultas

b) SELECT first_name AS Nombre, last_name AS Apellido
   FROM HR_employees
   WHERE commission_pct IS NULL;   //72 consultas

c) SELECT Count(*) AS No_Comision, (SELECT Count(*)
                                    FROM HR_EMPLOYEES
                                    WHERE commission_pct IS NOT NULL) AS
   Comision
   FROM HR_EMPLOYEES
   WHERE commission_pct IS NULL;   //1 registro

d) SELECT first_name AS Nombre, last_name AS Apellido, email, salary AS Paga
   FROM HR_employees
   ORDER BY salary;   //107 registros

e) SELECT E.first_name AS Nombre, E.last_name AS Apellido, E.email, E.salary AS Paga, D.department_id AS Departamento
   FROM HR_employees AS E, HR_departments AS D
   WHERE E.department_id = D.department_id
   ORDER BY salary;   //106 registros = Hay un departamento que no tiene trabajadores

f) SELECT last_name AS Apellido
   FROM HR_employees
   WHERE last_name NOT LIKE 'e*' AND last_name LIKE '*t*' AND last_name NOT LIKE '*n'
   ORDER BY last_name   //24 registros

g) SELECT last_name AS Apellidos, COUNT(*) AS Cuantos
   FROM HR_employees
   WHERE last_name NOT LIKE '*h' AND last_name NOT LIKE '*r'
   GROUP BY last_name
   HAVING COUNT (*) > 1;   // 3 registros

h) SELECT e.last_name AS Apellido, e.email, d.department_name AS [Nombre de departamento]
FROM HR_employees AS e, HR_departments AS d
WHERE e.department_id = d.department_id AND e.employee_id = d.manager_id
ORDER BY department_name   //11 registros

i) SELECT first_name AS Nombre, last_name AS Apellido, region_name AS Region
FROM HR_employees AS e, HR_departments AS d, HR_locations AS l, HR_countries AS c, HR_regions AS r
WHERE e.department_id = d.department_id AND e.employee_id = d.manager_id AND d.location_id = l.location_id AND l.country_id = c.country_id AND c.region_id = r.region_id AND e.salary > (SELECT AVG(e.salary) FROM HR_employees AS e2, HR_employees AS d2 WHERE e2.department_id = d2.department_id AND e2.employee_id = d2.manager_id)
GROUP BY first_name, last_name, region_name, salary

j) SELECT department_name AS [Nombre de departamento], city AS Ciudad, country_name AS Pais, region_name AS Region
FROM HR_departments AS d, HR_locations AS l, HR_countries AS c, HR_regions AS r
WHERE d.location_id = l.location_id AND l.country_id = c.country_id AND c.region_id = r.region_id
ORDER BY country_name DESC   //27 registros

k) SELECT first_name & ', ' & last_name AS [Nombre y apellidos], job_title AS [Categoria laboral], min_salary AS [Sueldo minimo]
FROM HR_employees AS e, HR_jobs AS j
WHERE e.job_id = j.job_id
ORDER BY min_salary;   //107 registros

l) SELECT JOB_TITLE, count(*) AS n_empleados, MAX(salary) AS [Mayor salario], MIN (salary) AS [Menos salario], AVG(salary) AS [Salario Medio]
FROM HR_JOBS AS J, HR_EMPLOYEES AS E
WHERE J.job_id = E.job_id
GROUP BY J.JOB_TITLE;   //19 registros

m) SELECT e.first_name AS Nombre, e.last_name AS Apellido, e1.first_name AS
    [Nombre Manager], e1.last_name AS [Apellido Manager]
    FROM HR_employees AS e, HR_jobs AS j, HR_employees AS e1
    WHERE e1.employee_id = e.manager_id AND e1.job_id = j.job_id
    ORDER BY j.job_id;   //106 registros

n) SELECT d.department_name, l.city, (SELECT SUM(salary)
                                    FROM HR_employees AS E2
                                    WHERE E2.department_id = d.department_id)
    AS SALARY_TOTAL
    FROM HR_locations AS l, HR_departments AS d
    WHERE l.location_id = d.location_id;   //27 registros

o) SELECT first_name & ', ' & last_name AS [Nombre, Apellido], job_title AS
    [Categoria Laboral]
    FROM HR_employees AS e, HR_jobs AS j
    WHERE e.job_id = j.job_id AND manager_id IS NULL   //1 registro

p) SELECT department_name AS Departamento, Format(AVG([salary]), '0.0000') AS
    Salario, count(*) AS Empleados, MAX(salary) AS Salario_Maximo, MIN(salary) AS
    Salario_Minimo
    FROM HR_jobs AS J, HR_departments AS D, HR_employees AS E
    WHERE D.department_id = E.department_id AND E.job_id = J.job_id
    GROUP BY department_name
    ORDER BY AVG(salary) DESC;   //11 registros

q) SELECT Count (*) AS Numero_empleados
    FROM HR_employees
    WHERE YEAR(hire_date)
    BETWEEN '1995' AND '1999'   //83 trabajadores

r) SELECT country_name AS [Nombre Pais], count(*) AS Cantidad
    FROM HR_countries AS C, HR_locations AS L
    WHERE C.country_id = L.country_id
    GROUP BY country_name;   //14 registros

s) SELECT city AS Ciudad, region_name AS Region, country_name AS Pais,
    COUNT(d.department_id) AS Cuantos
    FROM HR_regions AS r, HR_countries AS c, HR_locations AS l, HR_departments
    AS d
    WHERE   r.region_id=c.region_id   AND   c.country_id=l.country_id   AND
    l.location_id=d.location_id

```
        GROUP BY city, country_name, region_name
        ORDER BY COUNT (d.department_id);              //7 registros
```

t)
```
   SELECT city AS Ciudad, country_name AS [Nombre Pais], region_name AS
   [Nombre Region]
   FROM HR_locations AS l, HR_countries AS c, HR_regions AS r
   WHERE  l.country_id = c.country_id  AND  c.region_id = r.region_id  AND
   location_id NOT IN (SELECT location_id FROM HR_departments AS d WHERE
   d.location_id IS NOT NULL)
   GROUP BY city, country_name, region_name          //16 registros
```

u)
```
   SELECT e.last_name & ', ' & e.first_name AS [Nombre Completo]
   FROM HR_EMPLOYEES AS e, HR_DEPARTMENTS AS d
   WHERE e.employee_id = d.manager_id
   ORDER BY e.last_name DESC                          //11 registros
```

v)
```
   SELECT e.last_name AS APELLIDO, e.salary AS SALARIO, d.department_name AS
   DEPARTAMENTO
   FROM HR_EMPLOYEES e, HR_DEPARTMENTS d
   WHERE e.department_id = d.department_id AND e.employee_id NOT IN (
     SELECT E1.EMPLOYEE_ID
     FROM HR_EMPLOYEES E1, HR_DEPARTMENTS D1
     WHERE D1.MANAGER_ID = E1.EMPLOYEE_ID)
   AND e.salary < (
     SELECT AVG(E.SALARY)
     FROM HR_EMPLOYEES E, HR_DEPARTMENTS D
     WHERE E.DEPARTMENT_ID = D.DEPARTMENT_ID)         //55 registros
```

w)
```
   SELECT  'CON'  AS  SI_NO,  D.DEPARTMENT_NAME  &  ','  &  L.CITY  AS
   DEPARTAMENTO_CIUDAD
   FROM HR_DEPARTMENTS D, HR_LOCATIONS L
   WHERE D.LOCATION_ID = L.LOCATION_ID AND D.DEPARTMENT_ID NOT IN (
         SELECT D2.DEPARTMENT_ID
         FROM HR_DEPARTMENTS D2, HR_LOCATIONS L2, HR_EMPLOYEES E2
         WHERE D2.LOCATION_ID = L2.LOCATION_ID AND E2.DEPARTMENT_ID =
   D2.DEPARTMENT_ID
         GROUP BY D2.DEPARTMENT_ID, L2.CITY
         HAVING COUNT(E2.EMPLOYEE_ID) > 1
         )
   UNION
   SELECT 'SIN' AS SI_NO, D1.DEPARTMENT_NAME & ',' & L1.CITY
```

```
        FROM HR_DEPARTMENTS D1, HR_LOCATIONS L1, HR_EMPLOYEES E1
        WHERE  D1.LOCATION_ID = L1.LOCATION_ID  AND E1.DEPARTMENT_ID =
        D1.DEPARTMENT_ID GROUP BY D1.DEPARTMENT_NAME, L1.CITY
        HAVING COUNT(E1.EMPLOYEE_ID) > 1              //27 registros
```

x) SELECT   J.job_id,   J.job_title AS   NOMBRE_JOB,   MIN(E.salary)   AS
   SALARIO_MINIMO
```
   FROM HR_JOBS AS J, HR_EMPLOYEES AS E
   WHERE E.job_id = J.job_id
   GROUP BY J.job_id, J.job_title                    //19 registros
```

y) SELECT E.FIRST_NAME AS NOMBRE, E.LAST_NAME AS APELLIDO, E.SALARY AS
   SALARIO, D.DEPARTMENT_NAME AS DEPARTAMENTO
```
   FROM HR_EMPLOYEES E, HR_DEPARTMENTS D
   WHERE D.DEPARTMENT_ID = E.DEPARTMENT_ID AND E.SALARY > (
         SELECT 0.75 * E1.SALARY
         FROM HR_EMPLOYEES E1
         WHERE E1.EMPLOYEE_ID = D.MANAGER_ID
         )                                           //19 registros
```

z) SELECT   E.LAST_NAME   AS   APELLIDO,   E.SALARY   AS   SALARIO,
   D.DEPARTMENT_NAME AS DEPARTAMENTO
```
   FROM HR_EMPLOYEES E, HR_DEPARTMENTS D, HR_LOCATIONS L
   WHERE  E.DEPARTMENT_ID = D.DEPARTMENT_ID  AND  D.LOCATION_ID =
   L.LOCATION_ID AND L.CITY IN (
         SELECT L1.CITY
         FROM HR_DEPARTMENTS D1, HR_LOCATIONS L1
         WHERE D1.LOCATION_ID = L1.LOCATION_ID
         GROUP BY L1.CITY
         HAVING COUNT(D1.DEPARTMENT_ID) > 1
         )
   AND E.SALARY < (
         SELECT AVG(E3.SALARY)
         FROM HR_EMPLOYEES E3
         WHERE E3.DEPARTMENT_ID = D.DEPARTMENT_ID
   )                                                 //12 registros
```

aa) ---

bb) SELECT E.FIRST_NAME, S.LAST_NAME
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    FROM HR_EMPLOYEES E, HR_EMPLOYEES S, HR_JOBS J
```

WHERE S.EMPLOYEE_ID = E.MANAGER_ID AND J.JOB_ID = E.JOB_ID AND
J.MAX_SALARY < 12000
AND E.SALARY < (SELECT AVG(E1.SALARY) FROM HR_EMPLOYEES E1
WHERE E.DEPARTMENT_ID = E1.DEPARTMENT_ID AND E.EMPLOYEE_ID <>
E1.EMPLOYEE_ID AND
E.JOB_ID = E1.JOB_ID)   //34 registros

cc) SELECT S.FIRST_NAME, (SELECT COUNT(*)
                                FROM HR_EMPLOYEES E1
                                WHERE E1.MANAGER_ID = S.EMPLOYEE_ID AND
                                E1.EMPLOYEE_ID NOT IN (SELECT MANAGER_ID
                                FROM HR_DEPARTMENTS D
                                WHERE D.MANAGER_ID IS NOT NULL))
        FROM HR_EMPLOYEES S
        WHERE S.EMPLOYEE_ID IN (SELECT DISTINCT E.MANAGER_ID
                                FROM HR_EMPLOYEES E
                                WHERE E.MANAGER_ID IS NOT NULL)
        //18 registros