EMPLOYEE DATABASE – SELECTING DATA FROM A TABLE

1. Find all employees with last name as Varley
    - Select first_name from employees where last_name like 'Varley'
2. Find number of records where salaries is greater than 50000
    - Select count(0) from salaries where salary > 50000 and to_date = '9999-01-01'
3. Find number of records where salaries is between 50000 and 70000
    - Select count(0) from salaries where salary between 50000 and 70000 and to_date = '9999-01-01'
4. Find number of employees whose salaries are greater than 50000
    - Select count(0) from salaries where salary > 50000 and to_date = '9999-01-01'
5. Find count of employees with last name that starts with V
    - Select first_name from employees where last_name like 'Varley'
6. Find employees with last name that starts with V but first name does not start with A
    - Select * from employees where last_name like 'V%' and first_name not like 'A%'
7. Find out number of employees in employees table
    - Select count(0) from employees
8. Find maximum salary in this company
    - Select max(salary) from salaries
9. Find average salary in this company
    - Select avg(salary) from salaries
10. List all employees who were born in March
    - Select * from employees where month(birth_date) = 3

Multiple Table Join Queries

1. What is the highest paid salary for the Marketing department
    - Select max(salary)
    - from salaries, departments, dept_emp
    - Where salaries.emp_no = dept.emp_no
    - And dept_emp.dept_no = departments.dept_no
    - And departments.dept_name = 'Marketing'
    - And dept_emp.to_date = '9999-01-01'
    - And salaries.to_date = '9999-01-01'
2. Find count of employees & list of employees who work for Marketing department
    - Select count(*)
    - from departments, dept_emp
    - Where departments.dept_name = 'Marketing'
    - And departments.dept_no = dept_emp.dept_no
    - And dept_emp.to_date = '9999-01-01'

    - Select employees.*
    - from departments, dept_emp, employees
    - Where departments.dept_name = 'Marketing'

- And departments.dept_no = dept_emp.dept_no
- And employees.emp_no = dept_emp.emp_no
- And dept_emp.to_date = '9999-01-01'

3. Find list of employees who make more than 70000 and work in Marketing department
   - Select employees.*
   - from salaries, departments, dept_emp, employees
   - Where salaries.emp_no = dept.emp_no
   - And dept_emp.dept_no = departments.dept_no
   - And departments.dept_name = 'Marketing'
   - And dept_emp.to_date = '9999-01-01'
   - And salaries.to_date = '9999-01-01'
   - And salaries.salary > 70000
   - And dept_emp.emp_no = employees.emp_no
4. Show employee name and title of all employees who were born in December
   - Select e.first_name, e.last_name, t. title
   - From employees e, titles t
   - Where e.emp_no = t.emp_no
   - And t.to_date = '9999-01-01'
   - And month(e.birth_date) = 12
5. List all employees who belong to Marketing Department and have last name as S
   - Select employees.*
   - from departments, dept_emp, employees
   - Where departments.dept_name = 'Marketing'
   - And departments.dept_no = dept_emp.dept_no
   - And employees.emp_no = dept_emp.emp_no
   - And dept_emp.to_date = '9999-01-01'
   - And employees.last_name like 'S%'

6. Three table join – Find the name of the current manager of each department
   - Select departments.dept_no, dept_manager.from_date, employees.first_name as "Manager First Name", employees.last_name "Manager Last Name"
   - from departments, dept_manager, employees
   - Where departments.dept_name = 'Marketing'
   - And departments.dept_no = dept_manager.dept_no
   - And employees.emp_no = dept_manager.emp_no
   - And dept_manager.to_date = '9999-01-01'

Group by

1. What is the highest paid salary in each department
   - Select d.dept_no, d.dept_name, max(s.salary)
   - From salaries s, dept_emp de, departments d
   - Where s.emp_no = d.emp_no
   - And de.dept_no = d.dept_no
   - And dept_emp.to_date = '9999-01-01'

- And salaries.to_date = ‘9999-01-01’
- Group by d.dept_no, d.dept_name

2. Show count of employees by each title
    - Select t. title, count(*)
    - From employees e, titles t
    - Where e.emp_no = t.emp_no
    - And t.to_date = ‘9999-01-01’
3. Show count of employees by each title for the Marketing department
    - Select t. title, count(*)
    - From employees e, titles t, dept_emp de, departments d
    - Where e.emp_no = t.emp_no
    - And d.dept_no = de.dept_no
    - And e.emp_no = de.emp_no
    - And d.dept_name = ‘Marketing’
    - And de.to_date = ‘9999-01-01’
    - And t.to_date = ‘9999-01-01’
4. Which manager manages highest number of employees?
    - Select departments.dept_name, manager.first_name as “Manager First Name”, manager.last_name “Manager Last Name” , count(*)
    - from departments, dept_manager, employees manager, employees, dept_emp
    - Where departments.dept_no = dept_manager.dept_no
    - And manager.emp_no = dept_manager.emp_no
    - And employees.emp_no = dept_emp.emp_no
    - And dept_emp.dept_no = departments.dept_no
    - And dept_manager.to_date = ‘9999-01-01’
    - And dept_emp.to_date = ‘9999-01-01’
    - Group by departments.dept_name, manager.first_name, manager.last_name