**ADVBS**

**Revision - SQL Lab Exercise**

Write SQL statements for the queries stated below. Use the ‘DreamHome’ database created in the last lab session:

1. List full details of all staff.

SELECT fName, lName

FROM Client

1. Produce a list of salaries for all staff, showing only staff number, first and last names, and salary.

SELECT fName, lName, salary\*12 AS 'Annual Salary'

FROM Staff

WHERE gender = 'F';

1. List the staff numbers of all staff who oversees a property.

SELECT DISTINCT staffNo

FROM PropertyForRent

WHERE staffNo IS NOT NULL;

1. Produce a list of monthly salaries for all staff, showing staff number, first and last name and salary details.

SELECT AVG(Salary) AS 'Average Salary'

FROM Staff

WHERE position != 'Manager'

1. List all staff with a salary greater than 10,000.

SELECT \*

FROM Staff

WHERE salary >=10000

1. List addresses of all branch offices in London or Glasgow.

SELECT city, postcode, street

FROM Branch

WHERE city='London' OR city='Glasgow'

--or can use IN ('London', 'Glasgow')

1. List all staff with a salary between 20,000 and 30,000.

SELECT \*

FROM Staff

WHERE salary BETWEEN 20000 AND 30000

1. List all managers and supervisors.

SELECT fname, lname, position

FROM Staff

WHERE position='Manager' OR position='Supervisor'

1. Find all staff first names that contain the letter ‘a’.

SELECT fname,lname

FROM Staff

WHERE fname LIKE '%a%'

1. List details of all property for rent which has not been overseen by any staff.

SELECT \*

FROM PropertyForRent

WHERE staffNo IS NOT NULL

1. List salaries for all staff, arranged in descending order of salary.

SELECT fname, lname,salary

FROM Staff

ORDER BY salary DESC

1. Produce abbreviated list of properties in order of property type.

SELECT \*

FROM PropertyForRent

ORDER BY type ASC;

1. How many properties cost more than £350 per month to rent?

SELECT COUNT (propertyNo) AS 'Total Properties'

FROM PropertyForRent

WHERE rent>350

1. Find number of Managers and sum of their salaries.

SELECT COUNT (StaffNo) AS 'Total Manager'

FROM Staff

WHERE position ='Manager'

1. Find minimum, maximum, and average staff salary.

SELECT MIN (salary) AS 'Min Salary', MAX(salary), AVG(salary) AS 'Average Salary'

FROM Staff

1. Find the total number of staffs in each branch and their total salaries.

SELECT COUNT (staffNo) AS 'Total Staff', SUM(salary) AS 'Total Salary'

FROM Staff

1. For each branch with more than 1 member of staff, find number of staff in each branch and sum of their salaries.
2. List staffs who work in the branch located at '163 Main St'.
3. List all staff whose salary is greater than the average salary, and show by how much.
4. List properties handled by staff at ‘163 Main St’.
5. List names of all staffs and branches details.
6. For each branch, list staffs who manage properties, including city in which branch is located and properties they manage.
7. Find number of properties handled by each staff member.
8. Find all staffs who work in a London branch.
9. Insert a new row into Staff table supplying data for all columns.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| staffNo | fname | lname | position | gender | dob | salary | branchNo |
| SG16 | Alan | Brown | Assistant | M | 1957-05-25 | 8300 | B003 |

1. Insert a new row into Staff table supplying data for all mandatory columns.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| staffNo | fname | lname | position | gender | dob | salary | branchNo |
| SG44 | Anne | Jones | Assistant | NULL | NULL | 8100 | B003 |

1. Increase staff SA9’s Salary by 3%.
2. Give all Assistants a 10% salary increment.
3. Promote Anne Jones (staffNo = 'SG44') to Manager and change her salary to £18,000.
4. Delete staffs that have the numbers SG44 and SG16.