

Oracle SQL Lab 2 Sample Solutions

1. Produce a list of employees showing for each employee his/her id, surname and Monthly Salary. The list should be headed Staff ID, Surname and Monthly Salary.

```
SQL> SELECT emp_id AS "Staff ID", surname AS Surname,  
2 salary AS "Monthly Salary"  
3 FROM employees;
```

2. Produce a list of the departments. The list should be headed:
Dept NAME Dept Code Dept Manager

```
SELECT dept_name AS "Dept Name", dept_id AS "Dept Code",  
manager_id AS "Dept Manager"  
FROM departments;
```

3. Produce a list of job levels showing for each level the minimum salary and the maximum salary

```
SQL> SELECT grade_level AS "Job level", min_sal AS "Minimum Salary",  
2 max_sal AS "Maximum Salary"  
3 FROM jobgrades;
```

4. Produce a list of employees showing for each employee his/her first name, his her surname (all in capital letters) and his/her id. The list should be headed as follows: "First Name" "Surname" "Staff ID". The list should be sorted by surname

```
SQL> SELECT first_name AS "First Name", UPPER(surname) AS surname,  
2 emp_id AS "Staff ID"  
3 FROM employees  
4 ORDER BY surname;
```

5. Produce a list of employees that earn annual salaries more than 23000. The list should show for each employee, the "Staff ID" and the "Annual Salary". The list should be sorted in descending order of salary

```
SQL> SELECT emp_id AS "Staff ID", salary AS "Annual Salary"  
2 FROM employees  
3 Where salary >23000;
```

6. Produce a list of all the staff in department COM1. The list should include for each staff, his/her staff id, surname, first name and the annual salary. The list should be sorted in ascending order of salary and then surname.

```
SQL> SELECT emp_id AS "Staff ID", surname AS "Surname",  
2 first_name AS "First Name", salary AS "Salary"  
3 FROM employees  
4 WHERE dept_id = 'COM1'  
5 ORDER BY salary, surname;
```

7. Produce a list of staff that earn between 20000 and 70000 in the Sals department.

```
SQL> SELECT emp_id AS "Staff ID", surname AS "Surname",  
2 first_name AS "First Name", salary AS "Salary"  
3 FROM employees  
4 WHERE salary BETWEEN 20000 AND 70000 AND dept_id = 'sals';
```

8. It has now been decided that the date employed by each staff should be included in the employees table. Modify the employees table to include this attribute. Its data type is date.

```
SQL> ALTER TABLE empldemo  
2 ADD (date_employed DATE);
```

9. Store the date that each staff listed below was employed as shown in the table below.

An example

```
SQL> UPDATE employees  
2 set date_employed = '26-SEP-01'  
3 WHERE emp_id = 'sk01';
```

10. Produce a list of staff employed after the **6th of July 2004**. The list should be headed Staff ID, Surname, Department, Date employed. Those recently employed should be listed first.

```
SQL> select emp_id AS "Staff ID", dept_id AS Department,  
2 date_employed AS "Date employed"  
3 FROM employees  
4 WHERE date_employed > '06-jul-04'  
5 order by date_employed DESC;
```

11. The annual salary of each staff has been increased by 1%. Implement the appropriate SQL statement to reflect this increase.

```
SQL> UPDATE employees  
2 SET salary = salary + (salary * 0.01);
```

12. Produce a staff list showing for each staff his/her first name, followed by his/her surname and followed by the staff's percentage commission if applicable. Those who are not entitled to a percentage commission should have a zero displayed in the percentage commission column.
The list should be headed:

First Name Surname Percentage Commission

```
SQL> SELECT first_name AS "First Name", surname AS Surname,  
2      NUL(comm_pct,0) AS "Percentage Commission"  
3  FROM employees;
```