Lab on Subqueries and Set operators

Solve the following:

Create Job\_history table by yourself and also insert the values. The description of table and the data in the table is provided on the pdf file on Subqueries and Set operators.

Create Job\_historytable.

SQL> desc job\_history

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)

insert into job\_history(employee\_id, start\_date, end\_date, job\_id, department\_id) values (102, to\_date('93-01-13', 'YY-MM-DD'), to\_date('98-07-24', 'YY-MM-DD'), 'IT\_PROG', 60);

insert into job\_history(employee\_id, start\_date, end\_date, job\_id, department\_id) values (101, to\_date('89-09-21', 'YY-MM-DD'), to\_date('93-10-27', 'YY-MM-DD'), 'AC\_ACCOUNT', 110); insert into job\_history(employee\_id, start\_date, end\_date, job\_id, department\_id) values (101, to\_date('93-10-28', 'YY-MM-DD'), to\_date('97-03-15', 'YY-MM-DD'), 'AC\_MGR', 110);

insert into job\_history(employee\_id, start\_date, end\_date, job\_id, department\_id) values (201, to\_date('96-02-17', 'YY-MM-DD'), to\_date('99-12-19', 'YY-MM-DD'), 'MK\_REP', 20);

insert into job\_history(employee\_id, start\_date, end\_date, job\_id, department\_id) values (114, to\_date('98-03-24', 'YY-MM-DD'), to\_date('99-12-31', 'YY-MM-DD'), 'ST\_CLERK', 50);

insert into job\_history(employee\_id, start\_date, end\_date, job\_id, department\_id) values (122, to\_date('99-01-01', 'YY-MM-DD'), to\_date('98-12-31', 'YY-MM-DD'), 'ST\_CLERK', 50);

insert into job\_history(employee\_id, start\_date, end\_date, job\_id, department\_id) values (200, to\_date('87-09-17', 'YY-MM-DD'), to\_date('93-06-17', 'YY-MM-DD'), 'AD\_ASST', 90);

insert into job\_history(employee\_id, start\_date, end\_date, job\_id, department\_id) values (176, to\_date('98-03-24', 'YY-MM-DD'), to\_date('98-12-31', 'YY-MM-DD'), 'SA\_REP', 80);

insert into job\_history(employee\_id, start\_date, end\_date, job\_id, department\_id) values (176, to\_date('99-01-01', 'YY-MM-DD'), to\_date('99-12-31', 'YY-MM-DD'), 'SA\_MAIN', 80);

insert into job\_history(employee\_id, start\_date, end\_date, job\_id, department\_id) values (200, to\_date('94-07-01', 'YY-MM-DD'), to\_date('98-12-31', 'YY-MM-DD'), 'AC\_ACCOUNT', 60);

1. Create a report that displays the employee number, last name, and salary of all employees who earn more than the average salary. Sort the results in order of ascending salary.

**select employee\_id, last\_name, salary**

**from employees**

**where salary>(select avg(salary) from employees)**

**order by salary;**

1. Write a query that displays the employee number and last name of all employees who work in a department with any employee whose last name contains a “u.”

**select employee\_id, last\_name**

**from employees**

**where department\_id in (select department\_id from employees where last\_name like '%u%');**

1. The HR department needs a report that displays the last name, department number, and job ID of all employees whose department location ID is 1700.

**select last\_name, department\_id, job\_id**

**from employees**

**where department\_id in (select department\_id from departments where location\_id = 1700);**

1. Create a report for HR that displays the last name and salary of every employee who reports to King.

**select last\_name, salary**

**from employees**

**where manager\_id in (select employee\_id from employees where last\_name='King');**

1. Create a report that displays the department number, last name, and job ID for every employee in the Executive department.

**select department\_id, last\_name, job\_id**

**from employees**

**where department\_id in (select department\_id from departments where department\_name='Executive');**

1. The HR department needs a list of department IDs for departments that do not contain the job ID ST\_CLERK. Use the set operators to create this report.

**SELECT department\_id FROM departments MINUS SELECT department\_id FROM employees WHERE job\_id = 'ST\_CLERK';**

1. Create a report that lists the employee IDs and job IDs of those employees who currently have a job title that is the same as their job title when they were initially hired by the company (that is, they changed jobs but have now gone back to doing their original job).

**SELECT employee\_id,job\_id FROM employees INTERSECT SELECT employee\_id,job\_id FROM job\_history;**