/\* 1-1 \*/

SELECT FIRST\_NAME||' '||LAST\_NAME AS NAME, JOB\_ID AS JOB, SALARY,

SALARY\*12+100 AS "INCREASED ANN\_SALARY", (SALARY+100)\*12 AS "INCREASED SALARY"

FROM EMPLOYEES;

/\* 1-2 \*/

SELECT LAST\_NAME || ': 1 Year Salary = ' || SALARY\*12

FROM EMPLOYEES;

/\* 1-3 \*/

SELECT DISTINCT DEPARTMENT\_ID, JOB\_ID

FROM EMPLOYEES;

/\* 2-1 \*/

SELECT LAST\_NAME AS "E OR O NAME"

FROM EMPLOYEES

WHERE LAST\_NAME LIKE '%e%' OR LAST\_NAME LIKE '%o%';

/\* 2-2 \*/

SELECT FIRST\_NAME||' '||LAST\_NAME AS NAME, JOB\_ID, HIRE\_DATE

FROM EMPLOYEES

WHERE HIRE\_DATE BETWEEN TO\_DATE('06-05-20') AND TO\_DATE('07-05-20')

ORDER BY HIRE\_DATE;

/\* 2\*3 \*/

SELECT FIRST\_NAME||' '||LAST\_NAME AS NAME, SALARY, JOB\_ID, COMMISSION\_PCT

FROM EMPLOYEES

WHERE COMMISSION\_PCT IS NOT NULL

ORDER BY SALARY DESC, COMMISSION\_PCT DESC;

/\* 3-1 \*/

SELECT INITCAP(FIRST\_NAME)||' '||INITCAP(LAST\_NAME)||' is a '|| JOB\_ID as "Employees JOBs."

FROM EMPLOYEES

WHERE SUBSTR(LAST\_NAME, -1) LIKE 's';

/\* 3-2 \*/

SELECT FIRST\_NAME||' '||LAST\_NAME AS NAME, SALARY, SALARY\*12 AS "Annual Salary",

NVL2 (COMMISSION\_PCT, SALARY||' + '||COMMISSION\_PCT, 'SALARY ONLY') AS "Commission?"

FROM EMPLOYEES;

/\* 3-3 \*/

SELECT FIRST\_NAME||' '||LAST\_NAME AS NAME, HIRE\_DATE, TO\_CHAR(HIRE\_DATE, 'DAY') AS "Day Of The Week"

FROM EMPLOYEES

ORDER BY TO\_CHAR(HIRE\_DATE, 'D');

/\* 4-1 \*/

SELECT DEPARTMENT\_ID, TO\_CHAR(SUM(SALARY), '$999,999.00') AS "Sum Salary",

TO\_CHAR(AVG(SALARY), '$999,999.00') AS "Avg Salary",

TO\_CHAR(MAX(SALARY), '$999,999.00') AS "Max Salary",

TO\_CHAR(MIN(SALARY), '$999,999.00') AS "Min Salary"

FROM EMPLOYEES

WHERE DEPARTMENT\_ID IS NOT NULL

GROUP BY DEPARTMENT\_ID

ORDER BY DEPARTMENT\_ID;

/\* 4-2 \*/

SELECT JOB\_ID, AVG(SALARY) AS "Avg Salary"

FROM EMPLOYEES

WHERE NOT JOB\_ID LIKE 'CLERK'

GROUP BY JOB\_ID

HAVING AVG(SALARY)>10000

ORDER BY AVG(SALARY) DESC;

/\* 5-1 \*/

SELECT DEPARTMENT\_NAME, COUNT(E.EMPLOYEE\_ID)

FROM EMPLOYEES E, DEPARTMENTS D

WHERE E.DEPARTMENT\_ID=D.DEPARTMENT\_ID

GROUP BY DEPARTMENT\_NAME

HAVING COUNT(E.EMPLOYEE\_ID)>=5

ORDER BY COUNT(E.EMPLOYEE\_ID) DESC;

/\* 5-2 \*/

CREATE TABLE Job\_Grades (

grade\_level VARCHAR2(3), lowest\_sal NUMBER, highest\_sal NUMBER);

INSERT INTO Job\_Grades VALUES ('A', 1000, 2999);

INSERT INTO Job\_Grades VALUES ('B', 3000, 5999);

INSERT INTO Job\_Grades VALUES ('C', 6000, 9999);

INSERT INTO Job\_Grades VALUES ('D', 10000, 14999);

INSERT INTO Job\_Grades VALUES ('E', 15000, 24999);

INSERT INTO Job\_Grades VALUES ('F', 25000, 40000);

COMMIT;

SELECT \* FROM JOB\_GRADES;

SELECT FIRST\_NAME||' '||LAST\_NAME AS NAME, JOB\_ID, DEPARTMENT\_NAME, HIRE\_DATE, SALARY, GRADE\_LEVEL

FROM JOB\_GRADES, EMPLOYEES E, DEPARTMENTS D

WHERE E.DEPARTMENT\_ID=D.DEPARTMENT\_ID AND SALARY BETWEEN LOWEST\_SAL AND HIGHEST\_SAL;

/\* 5-3 \*/

SELECT E1.FIRST\_NAME||' '||E1.LAST\_NAME || ' report to ' ||

NVL2(E1.MANAGER\_ID, UPPER(E2.FIRST\_NAME||' '||E2.LAST\_NAME), '')

FROM EMPLOYEES E1 LEFT OUTER JOIN EMPLOYEES E2 ON E1.MANAGER\_ID=E2.EMPLOYEE\_ID;

/\* 6-1 \*/

SELECT FIRST\_NAME||' '||LAST\_NAME AS NAME, JOB\_ID, SALARY, HIRE\_DATE

FROM EMPLOYEES E1

WHERE E1.SALARY IN(SELECT MIN(SALARY)

FROM EMPLOYEES E2

WHERE E1.JOB\_ID = E2.JOB\_ID);

/\* 6-2 \*/

SELECT FIRST\_NAME||' '||LAST\_NAME AS NAME, SALARY, DEPARTMENT\_ID, JOB\_ID

FROM EMPLOYEES E1

WHERE SALARY > (SELECT AVG(SALARY)

FROM EMPLOYEES E2

WHERE E1.DEPARTMENT\_ID = E2.DEPARTMENT\_ID);

/\* 6-3 \*/

SELECT EMPLOYEE\_ID, FIRST\_NAME||' '||LAST\_NAME AS NAME, JOB\_ID, HIRE\_DATE

FROM EMPLOYEES

WHERE DEPARTMENT\_ID IN(SELECT DEPARTMENT\_ID

FROM DEPARTMENTS

WHERE LOCATION\_ID IN(SELECT LOCATION\_ID

FROM LOCATIONS

WHERE CITY LIKE 'O%'));

/\* 6-4 \*/

SELECT FIRST\_NAME||' '||LAST\_NAME AS NAME, JOB\_ID, SALARY, DEPARTMENT\_ID,

(SELECT TO\_CHAR(AVG(SALARY), '99999')

FROM EMPLOYEES E2

WHERE E1.DEPARTMENT\_ID=E2.DEPARTMENT\_ID) AS "Department Avg Salary"

FROM EMPLOYEES E1;

/\* 7-1 \*/

SELECT EMPLOYEE\_ID, JOB\_ID, DEPARTMENT\_ID

FROM EMPLOYEES

UNION ALL

SELECT EMPLOYEE\_ID, JOB\_ID, DEPARTMENT\_ID

FROM JOB\_HISTORY

ORDER BY EMPLOYEE\_ID;

/\* 7-2 \*/

SELECT EMPLOYEE\_ID, JOB\_ID

FROM EMPLOYEES

INTERSECT

SELECT EMPLOYEE\_ID, JOB\_ID

FROM JOB\_HISTORY;

SELECT EMPLOYEE\_ID, JOB\_ID, START\_DATE, END\_DATE

FROM JOB\_HISTORY

WHERE EMPLOYEE\_ID = 176;

/\* 7-3 \*/

SELECT EMPLOYEE\_ID

FROM EMPLOYEES

MINUS

SELECT EMPLOYEE\_ID

FROM JOB\_HISTORY;