

Name _____

1. (8 pts) Create an email list by writing a query that shows LASTNAME, FIRSTNAME, and EMP_EMAIL (*alias* as EMAIL_ADDRESS). *Sort* by ascending LASTNAME.

2. (8 pts) Write a query to determine each employee's total number of benefit selection records (of any type and any date, currently active or not) listed in the database. Show EMPID along with a total count of the number of benefit selection records associated with the employee. Alias the count column as Benefit_Records_Count.

3. (8 pts) Write a query that shows *only* employees that have the letter x (lowercase) anywhere in their first name. Display the EMPID, LASTNAME, and FIRSTNAME. Sort by HIREDATE ascending.

4. (8 pts) Write a query that uses a subquery to display *distinct* benefits that have been selected by an employee *and* has an ACTIVE DATE that is in the future from the *date this query is run* (**hint: use SYSDATE to find the date the query is run**). Show BENEFITID, CATEGORY, and SHORTDESC.

5. (8 pts) Write a query that lists separated employees and their service time *in years* (MONTHS_OF_SERVICE represents service time *in months*). Show FIRSTNAME, LASTNAME, and YEARS_OF_SERVICE (alias your calculation with this).

6. (4 pts) Assume the tables have been created but the data shown in the reference sheets has *not yet been entered* into the database. Write a statement that would add the *first record* shown in table SEPARATION to the database.

7. (4 pts) The employee with ID number 20001 has been assigned to parking lot A until now. Due to a change in vehicle type he needs to be assigned to lot B instead. Write a query that changes the parking lot for the employee with EMPID of 20001 from LOT A to LOT B.

8. (8 pts) Write a query that returns a list of benefits that had been selected by employees that have been involuntarily separated. Show I_SEP_EMPID, MONTHS_OF_SERVICE, DEPARTMENT, BENEFITID, and SHORTDESC.

9. (8 pts) Write a query that will return a single string (call the attribute PARKING_MESSAGE) of the form: "[FIRSTNAME] [LASTNAME] parks or parked in [PARKINGLOT]." For example, the query should return the following two results for the first and second records shown in the EMPLOYEE table:

Rebecca Felton parks or parked in LOT C.

Hattie Caraway parks or parked in LOT A.

10. (8 pts) SEPARATION.MONTHS_OF_SERVICE is a column that can be derived from other columns. EMPLOYEE.HIREDATE and SEPARATION.DATE_EFFECTIVE can be used to calculate this same value. **Write a query that derives the value from these columns and alias it as CALC_MONTHS_OF_SERVICE. Show this alongside of the MONTHS_OF_SERVICE column that is stored in the database.** The purpose of doing this is to compare the calculated and stored values and fix any errors in the stored value. ***Caution: If you do any calculations with DATE data, the results will be in the units of days. For instance, '04-APR-2015' minus '01-APR-2015' = 3 days.*** ***Hint: Converting days to months. Use $\text{Days}/365 * 12 = \text{Months}$. So for 40 days: $40/365 * 12 = 1.32$ months***

11. (3 pts) Write a query that will delete employee number 20016, Samuel Huntington, from the database. Be certain to write it in a way that ensures that only the correct record is deleted.

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--1
SELECT LASTNAME, FIRSTNAME, EMP_EMAIL AS EMAIL_ADDRESS
FROM EMPLOYEE
ORDER BY LASTNAME ASC
;

--2
SELECT EMPID, COUNT(*) AS Benefit_Records_Count
FROM SELECTION
GROUP BY EMPID
;

--3
SELECT EMPID, LASTNAME, FIRSTNAME
FROM EMPLOYEE
WHERE FIRSTNAME LIKE '%x%'
ORDER BY HIREDATE ASC
;

--4
SELECT BENEFITID, CATEGORY, SHORTDESC
FROM BENEFIT
WHERE BENEFITID IN
    (SELECT BENEFITID
     FROM SELECTION
     WHERE ACTIVEDATE > SYSDATE)
;

--5
SELECT FIRSTNAME, LASTNAME, MONTHS_OF_SERVICE/12 AS YEARS_OF_SERVICE
FROM SEPARATION S, EMPLOYEE E
WHERE E.EMPID = S.SEPARATION_EMPID
;

--6
INSERT INTO SEPARATION (SEPARATION_EMPID, DATE_ENTERED, DATE_EFFECTIVE, MONTHS_OF_SERVICE,
TYPE_CODE) VALUES
('20015', '11-NOV-2013', '01-JAN-2014', 430.8, 'V')
;
INSERT INTO SEPARATION VALUES
('20015', '11-NOV-2013', '01-JAN-2014', 430.8, 'V')
;

--7
UPDATE EMPLOYEE
SET PARKINGLOT = 'LOT B'
WHERE EMPID = 20001
;

--8
SELECT I_SEP_EMPID, MONTHS_OF_SERVICE, DEPARTMENT, B.BENEFITID, SHORTDESC
FROM benefit B,selection SEL,employee E,separation SEP,sep_involuntary I
WHERE
    B.BENEFITID = SEL.BENEFITID AND
    SEL.EMPID = E.EMPID AND
    E.EMPID = SEP.SEPARATION_EMPID AND
    SEP.SEPARATION_EMPID = I.I_SEP_EMPID
;

--9    RTRIM(COLUMN) should also be used to remove following spaces.
SELECT (FIRSTNAME || ' ' || LASTNAME || ' parks or parked in ' || PARKINGLOT || '.') AS
PARKING_MESSAGE
FROM EMPLOYEE
;

--10
SELECT MONTHS_OF_SERVICE, ((DATE_EFFECTIVE - HIREDATE)/365 * 12) AS CALC_MONTHS_OF_SERVICE
FROM EMPLOYEE E, SEPARATION S
WHERE E.EMPID = S.SEPARATION_EMPID
;

--11
DELETE FROM EMPLOYEE
WHERE EMPID = '20016'
;

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