

Assignment:

```
create table Emp(  
EMPNO int,  
EMPNAME varchar2(50),  
JOB varchar2(50),  
HIREDT varchar2(50),  
MGR int,  
SALA int,  
COMM int,  
DEPNO int);
```

```
SELECT * FROM EMP
```

EMPNO	EMPNAME	JOB	HIREDAT	MGR	SAL	COMM	DEPTNO
7369	SMITH	CLERK	17-DEC-80	7902	800	-	20
7499	ALLEN	SALESMAN	20-FEB-81	7698	1600	300	30
7521	WARD	SALESMAN	22-FEB-81	7698	1250	500	30
7566	JONES	MANAGER	02-APR-81	7839	2975	-	20
7698	BLAKE	MANAGER	01-MAY-81	7839	2850	-	30
7654	MARTIN	SALESMAN	28-SEP-81	7698	1250	1400	30
7782	CLARK	MANAGER	09-JUN-81	7839	2450	-	10
7788	SCOTT	ANALYST	19-APR-87	7566	3000	-	20
7839	KING	PRESIDENT	17-NOV-81	-	5000	-	10
7844	TURNER	SALESMAN	08-SEP-81	7698	1500	0	30
7876	ADAMS	CLERK	23-MAY-87	7788	1100	-	20
7900	JAMES	CLERK	03-DEC-81	7698	950	-	30
7902	FORD	ANALYST	03-DEC-81	7566	3000	-	20
7934	MILLER	CLERK	23-JAN-82	7782	1300	-	10

```
select EMPNAME  
from emp  
where COMM IS NOT NULL AND COMM <> 0;
```

EMPNAME
ALLEN
WARD
MARTIN

```
select EMPNAME
from emp
where COMM IS NOT NULL;
```

EMPNAME
ALLEN
WARD
MARTIN
TURNER

```
SELECT empname || ' is working as a ' || job || ' in the Department ' || DEPTNO || ' and their salary
is ' || sal || '.'
FROM emp
WHERE EMPNAME = 'JONES' AND JOB = 'MANAGER';
```

EMPNAME 'ISWORKINGASA' JOB 'INTHEDEPARTMENT' DEPTNO 'ANDTHEIRSALARYIS' SAL '.'
JONES is working as a MANAGER in the Department 20 and their salary is 2975.

```
SELECT DISTINCT JOB
FROM EMP;
```

JOB
CLERK
SALESMAN
PRESIDENT
MANAGER
ANALYST

```
SELECT job, COUNT(*)
FROM emp
GROUP BY job;
```

JOB	COUNT(*)
CLERK	4
SALESMAN	4
PRESIDENT	1
MANAGER	3
ANALYST	2

```
SELECT LENGTH(EMPNO)
FROM EMP
WHERE JOB = 'SALESMAN';
```

LENGTH(EMPNO)
4
4
4
4

```
SELECT EMPNAME, JOB, SAL
FROM EMP
ORDER BY SAL;
```

EMPNAME	JOB	SAL
SMITH	CLERK	800
JAMES	CLERK	950
ADAMS	CLERK	1100
WARD	SALESMAN	1250
MARTIN	SALESMAN	1250
MILLER	CLERK	1300
TURNER	SALESMAN	1500
ALLEN	SALESMAN	1600
CLARK	MANAGER	2450
BLAKE	MANAGER	2850
JONES	MANAGER	2975
SCOTT	ANALYST	3000
FORD	ANALYST	3000
KING	PRESIDENT	5000

```
SELECT COUNT(*)
FROM EMP
```

WHERE SAL > 1000;

COUNT(*)
12

SELECT *

FROM EMP

WHERE JOB = 'CLERK' AND JOB = 'MANAGER';

no data found

SELECT *

FROM EMP

WHERE EMPNAME LIKE 'A%';

EMPNO	EMPNAME	JOB	HIREDAT	MGR	SAL	COMM	DEPTNO
7499	ALLEN	SALESMAN	20-FEB-81	7698	1600	300	30
7876	ADAMS	CLERK	23-MAY-87	7788	1100	-	20

SELECT INSTR(empname, 'K') as k_location

FROM emp

WHERE empname = 'BLAKE';

K_LOCATION
4

SELECT *

FROM EMP

WHERE HIREDAT <= TO_DATE('1982-12-31', 'YYYY-MM-DD') AND JOB = 'CLERK';

EMPNO	EMPNAME	JOB	HIREDAT	MGR	SAL	COMM	DEPTNO
7369	SMITH	CLERK	12/17/1980	7902	800	-	20
7900	JAMES	CLERK	12/03/1981	7698	950	-	30
7934	MILLER	CLERK	01/23/1982	7782	1300	-	10

SELECT INSTR(empname, 'R') as k_location

FROM emp

WHERE empname = 'MARTIN';

K_LOCATION
3

UPDATE EMP

SET EMPNAME = REPLACE(EMPNAME, 'KING', 'KONG')

WHERE EMPNAME = 'KING';

EMPNO	EMPNAME	JOB	HIREDAT	MGR	SAL	COMM	DEPTNO
7839	KONG	PRESIDENT	11/17/1981	-	5000	-	10

SELECT LPAD(CONCAT('Mr. ', EMPNAME), 20) AS Name

FROM emp;

NAME
Mr. SMITH
Mr. ALLEN
Mr. WARD
Mr. JONES
Mr. BLAKE
Mr. MARTIN
Mr. CLARK
Mr. SCOTT
Mr. KONG
Mr. TURNER
Mr. ADAMS
Mr. JAMES
Mr. FORD
Mr. MILLER

SELECT SUBSTR(EMPNAME, 1, 1) AS first_letter

FROM emp

WHERE sal = 800;

FIRST_LETTER
S

```
SELECT LOWER(EMPNAME) AS EMP_NAME, JOB
FROM EMP
```

EMP_NAME	JOB
smith	CLERK
allen	SALESMAN
ward	SALESMAN
jones	MANAGER
blake	MANAGER
martin	SALESMAN
clark	MANAGER
scott	ANALYST
kong	PRESIDENT
turner	SALESMAN
adams	CLERK
james	CLERK
ford	ANALYST
milller	CLERK

```
SELECT MONTHS_BETWEEN(SYSDATE, HIREDAT) AS MONTHS_WORKED
FROM emp
WHERE empname = 'MILLER';
```

MONTHS_WORKED
492.985414426523297491039426523297491039

```
SELECT TO_CHAR(hiredat, 'YYYY') AS hire_year
FROM emp
WHERE empname = 'ADAMS';
```

HIRE_YEAR
1987

After adding the experiences in the table, the table looks like

EMPNO	EMPNAME	JOB	HIREDAT	MGR	SAL	COMM	DEPTNO	EXPERIENCE
7369	SMITH	CLERK	12/17/1980	7902	800	-	20	5
7499	ALLEN	SALESMAN	02/20/1981	7698	1600	300	30	10
7521	WARD	SALESMAN	02/22/1981	7698	1250	500	30	8
7566	JONES	MANAGER	04/02/1981	7839	2975	-	20	15
7698	BLAKE	MANAGER	05/01/1981	7839	2850	-	30	13
7654	MARTIN	SALESMAN	09/28/1981	7698	1250	1400	30	8
7782	CLARK	MANAGER	06/09/1981	7839	2450	-	10	11
7788	SCOTT	ANALYST	04/19/1987	7566	3000	-	20	18
7839	KONG	PRESIDENT	11/17/1981	-	5000	-	10	25
7844	TURNER	SALESMAN	09/08/1981	7698	1500	0	30	9
7876	ADAMS	CLERK	05/23/1987	7788	1100	-	20	7
7900	JAMES	CLERK	12/03/1981	7698	950	-	30	6
7902	FORD	ANALYST	12/03/1981	7566	3000	-	20	18
7934	MILLER	CLERK	01/23/1982	7782	1300	-	10	8

SELECT EXPERIENCE

FROM EMP

WHERE EMPNO = 7788

EXPERIENCE
18

UPDATE emp

SET SAL = SAL * 1.1

WHERE EXPERIENCE > 10;

EMPNO	EMPNAME	JOB	HIREDAT	MGR	SAL	COMM	DEPTNO	EXPERIENCE
7369	SMITH	CLERK	12/17/1980	7902	800	-	20	5
7499	ALLEN	SALESMAN	02/20/1981	7698	1600	300	30	10
7521	WARD	SALESMAN	02/22/1981	7698	1250	500	30	8
7566	JONES	MANAGER	04/02/1981	7839	3273	-	20	15
7698	BLAKE	MANAGER	05/01/1981	7839	3135	-	30	13
7654	MARTIN	SALESMAN	09/28/1981	7698	1250	1400	30	8
7782	CLARK	MANAGER	06/09/1981	7839	2695	-	10	11
7788	SCOTT	ANALYST	04/19/1987	7566	3300	-	20	18
7839	KONG	PRESIDENT	11/17/1981	-	5500	-	10	25
7844	TURNER	SALESMAN	09/08/1981	7698	1500	0	30	9
7876	ADAMS	CLERK	05/23/1987	7788	1100	-	20	7
7900	JAMES	CLERK	12/03/1981	7698	950	-	30	6
7902	FORD	ANALYST	12/03/1981	7566	3300	-	20	18
7934	MILLER	CLERK	01/23/1982	7782	1300	-	10	8