

# DBMS LAB - 3 ASSIGNMENT

## REPORT

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Continuing from the previous Company Database.

1. Write a **SELECT** query to display a list of all project numbers for projects that involve an employee whose last name is 'Smith', either as a worker or as a manager of the department that controls the project.

```
mysql> UPDATE EMPLOYEE,PROJECT,WORKS_ON SET salary=salary*10 WHERE Pnumber=Pno and Essn=Ssn and Pname='PRODUCTX';
Query OK, 2 rows affected (0.01 sec)
Rows matched: 2 Changed: 2 Warnings: 0
```

```
mysql> SELECT *FROM EMPLOYEE;
```

Fname	Minit	Lname	Ssn	Bdate	Address	sex	salary	Super_Ssn	Dno
JOHN	B	SMITH	123456789	1965-01-09	731 FONDREN, HOUSTON, TX	M	300000.00	333445555	5
FRANKLIN	T	WONG	333445555	1955-12-08	638 VOSS, HOUSTON, TX	M	400000.00	888665555	5
JOYCE	A	ENGLISH	453453453	1972-07-31	5631 RICE, HOUSTON, TX	F	300000.00	333445555	5
RAMESH	K	NARAYAN	666884444	1962-09-15	975 FINE OAK, HUMBLE, TX	M	380000.00	333445555	5
JAMES	E	BORG	888665555	1937-11-10	450 STONE, HUDSON, TX	M	550000.00	NULL	1
JENNIFER	S	WALLACE	987654321	1941-06-20	291 BERRY, BELLAIN, TX	F	430000.00	888665555	4
AHMAD	V	JABBAR	987987987	1969-03-29	980 DALLAS, HOUSTON, TX	M	250000.00	987654321	4
ALICIA	J	ZELAYA	999887777	1968-01-19	3321 CASTLE SPRING, TX	F	250000.00	987654321	4

8 rows in set (0.00 sec)

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2. Write a **SELECT** query to retrieve all employees whose address is in Houston, Texas

```
mysql> SELECT Fname, Minit, Lname, Hours from employee, project, works_on where Pnumber=Pno and Pname='Productx' and Dnum=Dno and Essn=Ssn and hours>10;
+-----+-----+-----+-----+
| Fname | Minit | Lname | Hours |
+-----+-----+-----+-----+
| JOHN  | B     | SMITH | 32.50 |
| JOYCE | A     | ENGLISH | 20.00 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

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3. Write a SELECT query to find all employees who were born during the 1950s.

```
mysql> SELECT X.Fname, X.Minit, X.Lname FROM EMPLOYEE X,EMPLOYEE Y WHERE Y.Ssn=X.Super_Ssn and Y.Fname='FRANKLIN';
```

Fname	Minit	Lname
JOHN	B	SMITH
JOYCE	A	ENGLISH
RAMESH	K	NARAYAN

3 rows in set (0.00 sec)

4. Write a SELECT query to raise the 10% salary of employees who are working on the 'ProductX' project and list the resulting salary along with their names.

```
mysql> SELECT * FROM EMPLOYEE WHERE Address like '%HOUSTON%';
```

Fname	Minit	Lname	Ssn	Bdate	Address	sex	salary	Super_Ssn	Dno
JOHN	B	SMITH	123456789	1965-01-09	731 FONDREN, HOUSTON, TX	M	30000.00	333445555	5
FRANKLIN	T	WONG	333445555	1955-12-08	638 VOSS, HOUSTON, TX	M	40000.00	888665555	5
JOYCE	A	ENGLISH	453453453	1972-07-31	5631 RICE, HOUSTON, TX	F	30000.00	333445555	5
AHMAD	V	JABBAR	987987987	1969-03-29	980 DALLAS, HOUSTON, TX	M	25000.00	987654321	4

4 rows in set (0.01 sec)

5. Write a SELECT query to retrieve all employees in department 5 whose salary is between \$30,000 and \$40,000.

```
mysql> SELECT Pnumber FROM PROJECT,EMPLOYEE WHERE Lname='Smith'and Dno=Dnum;
```

Pnumber
1
2
3

3 rows in set (0.01 sec)

6. Write a SELECT query to find the names of all employees who are directly supervised by 'Franklin Wong'.

```
mysql> SELECT * FROM EMPLOYEE WHERE salary BETWEEN '300000' AND '400000' and Dno=5;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Fname | Minit | Lname | Ssn      | Bdate   | Address                | sex | salary  | Super_Ssn | Dno |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| FRANKLIN | T     | WONG  | 333445555 | 1955-12-08 | 638 VOSS, HOUSTON, TX | M   | 400000.00 | 888665555 | 5   |
| RAMESH   | K     | NARAYAN | 666884444 | 1962-09-15 | 975 FINE OAK, HUMBLE, TX | M   | 380000.00 | 333445555 | 5   |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

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7. Write a SELECT query to retrieve the names of all employees in department 5 who work more than 10 hours per week on the ProductX project.

```
mysql> SELECT Fname, Minit, Lname from DEPENDENT, EMPLOYEE WHERE Fname=Dependent_name and Essn=Ssn;
Empty set (0.01 sec)
```

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8. List the names of all employees who have a dependent with the same first name as themselves.

```
mysql> SELECT * FROM EMPLOYEE WHERE Bdate BETWEEN '1950-01-01' AND '1959-12-31';
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Fname | Minit | Lname | Ssn      | Bdate   | Address                | sex | salary  | Super_Ssn | Dno |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| FRANKLIN | T     | WONG  | 333445555 | 1955-12-08 | 638 VOSS, HOUSTON, TX | M   | 400000.00 | 888665555 | 5   |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.01 sec)
```

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