

Assignment Test 1

```
CREATE DATABASE ORG123;
```

```
SHOW DATABASES;
```

```
USE ORG123;
```

```
CREATE TABLE Worker (  
    WORKER_ID INT NOT NULL PRIMARY KEY AUTO_INCREMENT,  
    FIRST_NAME CHAR(25),  
    LAST_NAME CHAR(25),  
    SALARY INT(15),  
    JOINING_DATE DATETIME,  
    DEPARTMENT CHAR(25)  
);
```

```
INSERT INTO Worker  
    (WORKER_ID, FIRST_NAME, LAST_NAME, SALARY, JOINING_DATE, DEPARTMENT) VALUES  
    (001, 'Monika', 'Arora', 100000, '14-02-20 09.00.00', 'HR'),  
    (002, 'Niharika', 'Verma', 80000, '14-06-11 09.00.00', 'Admin'),  
    (003, 'Vishal', 'Singhal', 300000, '14-02-20 09.00.00', 'HR'),  
    (004, 'Amitabh', 'Singh', 500000, '14-02-20 09.00.00', 'Admin'),  
    (005, 'Vivek', 'Bhati', 500000, '14-06-11 09.00.00', 'Admin'),  
    (006, 'Vipul', 'Diwan', 200000, '14-06-11 09.00.00', 'Account'),  
    (007, 'Satish', 'Kumar', 75000, '14-01-20 09.00.00', 'Account'),  
    (008, 'Geetika', 'Chauhan', 90000, '14-04-11 09.00.00', 'Admin');
```

```
CREATE TABLE Bonus (  
    WORKER_REF_ID INT,  
    BONUS_AMOUNT INT(10),  
    BONUS_DATE DATETIME,  
    FOREIGN KEY (WORKER_REF_ID)
```

```

REFERENCES Worker(WORKER_ID)

ON DELETE CASCADE

);

INSERT INTO Bonus
(WORKER_REF_ID, BONUS_AMOUNT, BONUS_DATE) VALUES
(001, 5000, '16-02-20'),
(002, 3000, '16-06-11'),
(003, 4000, '16-02-20'),
(001, 4500, '16-02-20'),
(002, 3500, '16-06-11');

CREATE TABLE Title (
    WORKER_REF_ID INT,
    WORKER_TITLE CHAR(25),
    AFFECTED_FROM DATETIME,
    FOREIGN KEY (WORKER_REF_ID)
        REFERENCES Worker(WORKER_ID)
        ON DELETE CASCADE
);

INSERT INTO Title
(WORKER_REF_ID, WORKER_TITLE, AFFECTED_FROM) VALUES
(001, 'Manager', '2016-02-20 00:00:00'),
(002, 'Executive', '2016-06-11 00:00:00'),
(008, 'Executive', '2016-06-11 00:00:00'),
(005, 'Manager', '2016-06-11 00:00:00'),
(004, 'Asst. Manager', '2016-06-11 00:00:00'),
(007, 'Executive', '2016-06-11 00:00:00'),
(006, 'Lead', '2016-06-11 00:00:00'),
(003, 'Lead', '2016-06-11 00:00:00');

```

```
SELECT FIRST_NAME AS WORKER_NAME FROM Worker;
```

```
SELECT FIRST_NAME AS "WORKER NAME" FROM Worker;
```

```
SELECT UPPER(FIRST_NAME) AS "UPPERCASE FIRST_NAME" FROM Worker;
```

```
SELECT DISTINCT DEPARTMENT AS "UNIQUE DEPARTMENTS" FROM Worker;
```

```
SELECT SUBSTRING(FIRST_NAME, 1, 3) AS "FIRST 3 CHARACTERS" FROM Worker;
```

```
SELECT INSTR(FIRST_NAME, 'a') AS "POSITION OF 'a'"
FROM Worker
WHERE FIRST_NAME = 'Amitabh';
```

```
SELECT RTRIM(FIRST_NAME) AS "TRIMMED FIRST_NAME" FROM Worker;
```

```
SELECT LTRIM(DEPARTMENT) AS "TRIMMED DEPARTMENT" FROM Worker;
```

```
SELECT DISTINCT DEPARTMENT, LENGTH(DEPARTMENT) AS "DEPARTMENT LENGTH" FROM Worker;
```

```
SELECT REPLACE(FIRST_NAME, 'a', 'A') AS "MODIFIED FIRST_NAME" FROM Worker;
```

```
SELECT CONCAT(FIRST_NAME, ' ', LAST_NAME) AS "COMPLETE_NAME" FROM Worker;
```

```
SELECT * FROM Worker ORDER BY FIRST_NAME ASC;
```

```
SELECT * FROM Worker ORDER BY FIRST_NAME ASC, DEPARTMENT DESC;
```

```
SELECT * FROM Worker WHERE FIRST_NAME IN ('Vipul', 'Satish');
```

```
SELECT * FROM Worker WHERE FIRST_NAME NOT IN ('Vipul', 'Satish');
```

```
SELECT * FROM Worker WHERE DEPARTMENT = 'Admin';
```

```
SELECT * FROM Worker WHERE FIRST_NAME LIKE '%a%';
```

```
SELECT * FROM Worker WHERE FIRST_NAME LIKE 'a';
```

```
SELECT * FROM Worker WHERE FIRST_NAME LIKE '_h'; -- Use five underscores followed by 'h' to  
match six characters
```

```
SELECT * FROM Worker WHERE SALARY BETWEEN 100000 AND 500000;
```

```
SELECT * FROM Worker WHERE JOINING_DATE BETWEEN '2014-02-01' AND '2014-02-28';
```

```
SELECT COUNT(*) AS "Admin Department Employee Count" FROM Worker WHERE DEPARTMENT =  
'Admin';
```

```
SELECT FIRST_NAME, LAST_NAME FROM Worker WHERE SALARY BETWEEN 50000 AND 100000;
```

```
SELECT DEPARTMENT, COUNT(*) AS "Number of Workers"  
FROM Worker  
GROUP BY DEPARTMENT  
ORDER BY COUNT(*) DESC;
```

```
SELECT FIRST_NAME, LAST_NAME, DEPARTMENT, COUNT(*)  
FROM Worker  
GROUP BY FIRST_NAME, LAST_NAME, DEPARTMENT  
HAVING COUNT(*) > 1;
```

```
SELECT *  
FROM (  
    SELECT *, @row_num := @row_num + 1 AS row_num
```

```
FROM Worker, (SELECT @row_num := 0) r  
) sub  
WHERE row_num % 2 = 1;
```

```
CREATE TABLE NewWorker AS SELECT * FROM Worker;
```

```
SELECT *  
FROM Worker w  
LEFT JOIN WorkerBackup wb ON w.WORKER_ID = wb.WORKER_ID  
WHERE wb.WORKER_ID IS NULL;
```

```
SELECT * FROM Worker  
WHERE DEPARTMENT ="HR";
```

```
SELECT * FROM Worker
```