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Registration Nuber:22BDS0365

BAJAJ-FINSERV-CHALLENGE

Code:

```
CREATE TABLE DEPARTMENT (
```

```
    DEPARTMENT_ID INTEGER PRIMARY KEY,
```

```
    DEPARTMENT_NAME VARCHAR(50) NOT NULL
```

```
);
```

```
CREATE TABLE EMPLOYEE (
```

```
    EMP_ID INTEGER PRIMARY KEY,
```

```
    FIRST_NAME VARCHAR(50) NOT NULL,
```

```
    LAST_NAME VARCHAR(50) NOT NULL,
```

```
    DOB DATE NOT NULL,
```

```
    GENDER VARCHAR(10),
```

```
    DEPARTMENT INTEGER,
```

```
    FOREIGN KEY (DEPARTMENT) REFERENCES DEPARTMENT(DEPARTMENT_ID)
```

```
);
```

```
CREATE TABLE PAYMENTS (
```

```
    PAYMENT_ID INTEGER PRIMARY KEY,
```

```
    EMP_ID INTEGER,
```

```
    AMOUNT DECIMAL(12,2) NOT NULL,
```

```
    PAYMENT_TIME DATETIME NOT NULL,
```

```
    FOREIGN KEY (EMP_ID) REFERENCES EMPLOYEE(EMP_ID)
```

```
);
```

```
INSERT INTO DEPARTMENT (DEPARTMENT_ID, DEPARTMENT_NAME) VALUES
```

```
(1, 'HR'),
```

```
(2, 'Finance'),
```

```
(3, 'Engineering'),
```

(4, 'Sales'),
(5, 'Marketing'),
(6, 'IT');

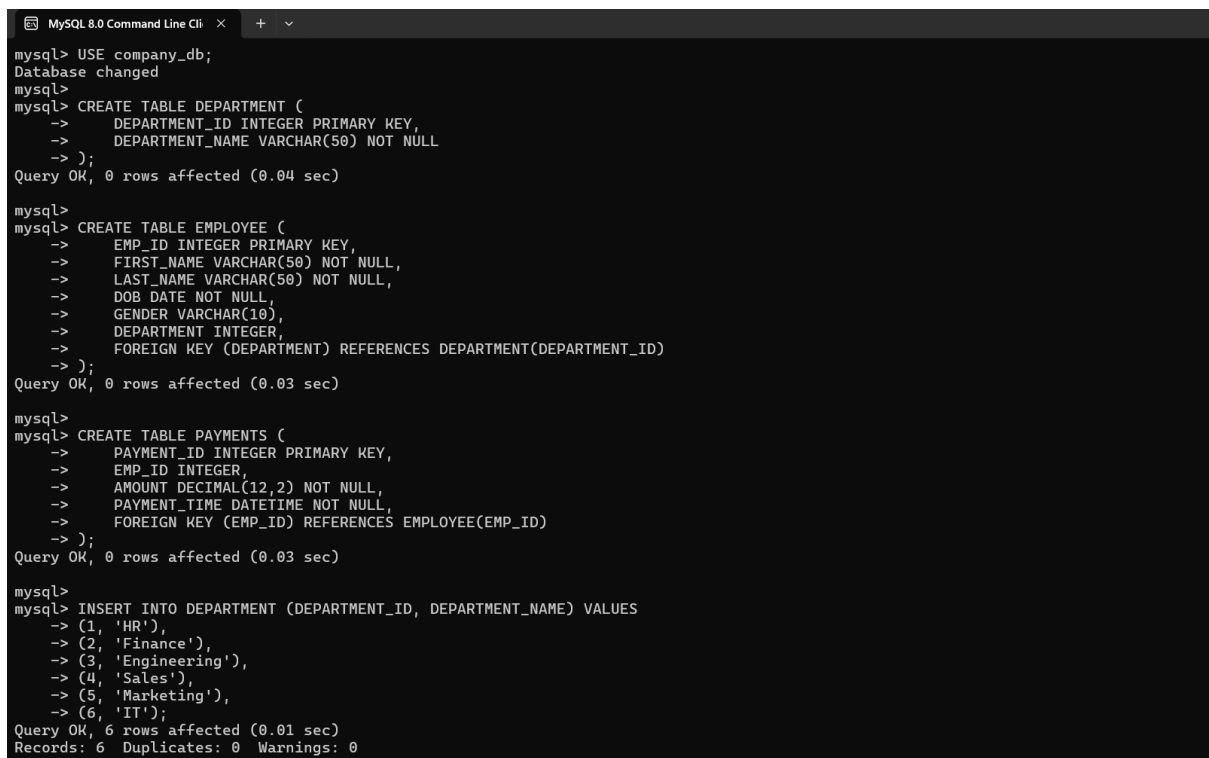
INSERT INTO EMPLOYEE (EMP_ID, FIRST_NAME, LAST_NAME, DOB, GENDER, DEPARTMENT) VALUES

(1, 'John', 'Williams', '1980-05-15', 'Male', 3),
(2, 'Sarah', 'Johnson', '1990-07-20', 'Female', 2),
(3, 'Michael', 'Smith', '1985-02-10', 'Male', 3),
(4, 'Emily', 'Brown', '1992-11-30', 'Female', 4),
(5, 'David', 'Jones', '1988-09-05', 'Male', 5),
(6, 'Olivia', 'Davis', '1995-04-12', 'Female', 1),
(7, 'James', 'Wilson', '1983-03-25', 'Male', 6),
(8, 'Sophia', 'Anderson', '1991-08-17', 'Female', 4),
(9, 'Liam', 'Miller', '1979-12-01', 'Male', 1),
(10, 'Emma', 'Taylor', '1993-06-28', 'Female', 5);

INSERT INTO PAYMENTS (PAYMENT_ID, EMP_ID, AMOUNT, PAYMENT_TIME) VALUES

(1, 2, 65784.00, '2025-01-01 13:44:12.824'),
(2, 4, 62736.00, '2025-01-06 18:36:37.892'),
(3, 1, 69437.00, '2025-01-01 10:19:21.563'),
(4, 3, 67183.00, '2025-01-02 17:21:57.341'),
(5, 2, 66273.00, '2025-02-01 11:49:15.764'),
(6, 5, 71475.00, '2025-01-01 07:24:14.453'),
(7, 1, 70837.00, '2025-02-03 19:11:31.553'),
(8, 6, 69628.00, '2025-01-02 10:41:15.113'),
(9, 4, 71876.00, '2025-02-01 12:16:47.807'),
(10, 3, 70098.00, '2025-02-03 10:11:17.341'),
(11, 6, 67827.00, '2025-02-02 19:21:27.753'),
(12, 5, 69871.00, '2025-02-05 17:54:17.453'),
(13, 2, 72984.00, '2025-03-05 09:37:35.974'),
(14, 1, 67982.00, '2025-03-01 06:09:51.983'),

```
(15, 6, 70198.00, '2025-03-02 10:34:35.753'),  
(16, 4, 74998.00, '2025-03-02 09:27:26.162');  
  
SELECT  
  
    p.AMOUNT AS SALARY,  
  
    CONCAT(e.FIRST_NAME, ' ', e.LAST_NAME) AS NAME,  
  
    TIMESTAMPDIFF(YEAR, e.DOB, CURDATE()) AS AGE,  
  
    d.DEPARTMENT_NAME  
  
FROM PAYMENTS p  
  
JOIN EMPLOYEE e ON p.EMP_ID = e.EMP_ID  
  
JOIN DEPARTMENT d ON e.DEPARTMENT = d.DEPARTMENT_ID  
  
WHERE DAY(p.PAYMENT_TIME) <> 1  
  
ORDER BY p.AMOUNT DESC  
  
LIMIT 1;
```



```
MySQL 8.0 Command Line Cli x + v  
mysql> USE company_db;  
Database changed  
mysql>  
mysql> CREATE TABLE DEPARTMENT (  
-> DEPARTMENT_ID INTEGER PRIMARY KEY,  
-> DEPARTMENT_NAME VARCHAR(50) NOT NULL  
-> );  
Query OK, 0 rows affected (0.04 sec)  
  
mysql>  
mysql> CREATE TABLE EMPLOYEE (  
-> EMP_ID INTEGER PRIMARY KEY,  
-> FIRST_NAME VARCHAR(50) NOT NULL,  
-> LAST_NAME VARCHAR(50) NOT NULL,  
-> DOB DATE NOT NULL,  
-> GENDER VARCHAR(10),  
-> DEPARTMENT INTEGER,  
-> FOREIGN KEY (DEPARTMENT) REFERENCES DEPARTMENT(DEPARTMENT_ID)  
-> );  
Query OK, 0 rows affected (0.03 sec)  
  
mysql>  
mysql> CREATE TABLE PAYMENTS (  
-> PAYMENT_ID INTEGER PRIMARY KEY,  
-> EMP_ID INTEGER,  
-> AMOUNT DECIMAL(12,2) NOT NULL,  
-> PAYMENT_TIME DATETIME NOT NULL,  
-> FOREIGN KEY (EMP_ID) REFERENCES EMPLOYEE(EMP_ID)  
-> );  
Query OK, 0 rows affected (0.03 sec)  
  
mysql>  
mysql> INSERT INTO DEPARTMENT (DEPARTMENT_ID, DEPARTMENT_NAME) VALUES  
-> (1, 'HR'),  
-> (2, 'Finance'),  
-> (3, 'Engineering'),  
-> (4, 'Sales'),  
-> (5, 'Marketing'),  
-> (6, 'IT');  
Query OK, 6 rows affected (0.01 sec)  
Records: 6 Duplicates: 0 Warnings: 0
```

```

MySQL 8.0 Command Line C
mysql> INSERT INTO EMPLOYEE (EMP_ID, FIRST_NAME, LAST_NAME, DOB, GENDER, DEPARTMENT) VALUES
-> (1, 'John', 'Williams', '1988-05-15', 'Male', 3),
-> (2, 'Sarah', 'Johnson', '1998-07-20', 'Female', 2),
-> (3, 'Michael', 'Smith', '1985-02-10', 'Male', 3),
-> (4, 'Emily', 'Brown', '1992-11-30', 'Female', 4),
-> (5, 'David', 'Jones', '1988-09-05', 'Male', 5),
-> (6, 'Olivia', 'Davis', '1995-04-12', 'Female', 1),
-> (7, 'James', 'Wilson', '1983-03-25', 'Male', 6),
-> (8, 'Sophia', 'Anderson', '1991-08-17', 'Female', 4),
-> (9, 'Liam', 'Miller', '1979-12-01', 'Male', 1),
-> (10, 'Emma', 'Taylor', '1993-06-28', 'Female', 5);
Query OK, 10 rows affected (0.00 sec)
Records: 10 Duplicates: 0 Warnings: 0

mysql> INSERT INTO PAYMENTS (PAYMENT_ID, EMP_ID, AMOUNT, PAYMENT_TIME) VALUES
-> (1, 2, 65784.00, '2025-01-01 13:44:12.824'),
-> (2, 4, 62736.00, '2025-01-06 18:36:37.802'),
-> (3, 1, 69437.00, '2025-01-01 10:19:21.563'),
-> (4, 3, 67183.00, '2025-01-02 17:21:57.341'),
-> (5, 2, 66273.00, '2025-02-01 11:49:15.764'),
-> (6, 5, 71475.00, '2025-01-01 07:24:14.453'),
-> (7, 1, 70837.00, '2025-02-03 19:11:31.553'),
-> (8, 6, 69628.00, '2025-01-02 10:41:15.113'),
-> (9, 4, 71876.00, '2025-02-01 12:16:47.807'),
-> (10, 3, 70098.00, '2025-02-03 10:11:17.341'),
-> (11, 6, 67827.00, '2025-02-02 19:21:27.753'),
-> (12, 5, 69871.00, '2025-02-05 17:54:17.453'),
-> (13, 2, 72984.00, '2025-03-05 09:37:35.974'),
-> (14, 1, 67982.00, '2025-03-01 06:09:51.983'),
-> (15, 6, 70198.00, '2025-03-02 10:34:35.753'),
-> (16, 4, 74998.00, '2025-03-02 09:27:26.162');
Query OK, 16 rows affected (0.00 sec)
Records: 16 Duplicates: 0 Warnings: 0

```

```

mysql> SELECT
->     p.AMOUNT AS SALARY,
->     CONCAT(e.FIRST_NAME, ' ', e.LAST_NAME) AS NAME,
->     TIMESTAMPDIFF(YEAR, e.DOB, CURDATE()) AS AGE,
->     d.DEPARTMENT_NAME
-> FROM PAYMENTS p
-> JOIN EMPLOYEE e ON p.EMP_ID = e.EMP_ID
-> JOIN DEPARTMENT d ON e.DEPARTMENT = d.DEPARTMENT_ID
-> WHERE DAY(p.PAYMENT_TIME) <> 1
-> ORDER BY p.AMOUNT DESC
-> LIMIT 1;
+-----+-----+-----+-----+
| SALARY | NAME           | AGE | DEPARTMENT_NAME |
+-----+-----+-----+-----+
| 74998.00 | Emily Brown   | 32  | Sales           |
+-----+-----+-----+-----+
1 row in set (0.01 sec)

```