

# TABLE CREATIONS

1.

```
CREATE TABLE room_status (  
    room_id INT PRIMARY KEY,  
    booking_status BOOLEAN DEFAULT FALSE,  
    ac_status BOOLEAN DEFAULT FALSE,  
    light_status BOOLEAN DEFAULT FALSE,  
    booking_time TIMESTAMP NULL,  
    leaving_time TIMESTAMP NULL,  
    status VARCHAR(50) DEFAULT 'unoccupied'  
);
```

---

2.

```
CREATE TABLE room_config (  
    room_id INT PRIMARY KEY,  
    max_capacity INT,  
    FOREIGN KEY (room_id) REFERENCES room_status(room_id) ON DELETE CASCADE  
);
```

---

3.

```
CREATE TABLE occupant (  
    room_id INT NOT NULL,  
    no_of_persons INT NOT NULL,  
    PRIMARY KEY (room_id),  
    FOREIGN KEY (room_id) REFERENCES room_status(room_id) ON DELETE CASCADE  
);
```

---

4.

```
CREATE TABLE booked_rooms (  
    room_id INT,  
    booking_time DATETIME,  
    duration INT, -- Assuming duration is in minutes  
    leaving_time DATETIME,  
    PRIMARY KEY (room_id, booking_time),  
    FOREIGN KEY (room_id) REFERENCES room_status(room_id) ON DELETE CASCADE  
);
```

---

# CODE EXECUTION

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS C:\Users\sakth\Desktop\room_management\room_management> java -cp "bin;lib/mysql-connector-j-8.3.0.jar" LoginPage
...Welcome to the Smart Office Management System...
Enter username: admin@ei.com
Enter password: eiadmin

Login successful!

--- Dashboard ---
1. Configure Room
2. Configure Specific Room
3. Add Occupant
4. Book Room
5. Cancel Room
6. UnConfigure Room
0. Logout
Enter your choice: 1
Enter the number of rooms to configure: 3
Enter room ID for room 1: 1
Enter room ID for room 2: 2
Enter room ID for room 3: 3

Office configured with 3 rooms.
Configured room IDs: [1, 2, 3]
Enter exit to go to main menu
exit
```

```
mysql> select*from room_status;
+-----+-----+-----+-----+-----+-----+-----+
| room_id | booking_status | ac_status | light_status | booking_time | leaving_time | status |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | 0 | 0 | 0 | NULL | NULL | unoccupied |
| 2 | 0 | 0 | 0 | NULL | NULL | unoccupied |
| 3 | 0 | 0 | 0 | NULL | NULL | unoccupied |
+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
--- Dashboard ---
1. Configure Room
2. Configure Specific Room
3. Add Occupant
4. Book Room
5. Cancel Room
6. UnConfigure Room
0. Logout
Enter your choice: 2
Enter room ID to configure: 1
Enter maximum capacity for room ID 1: 10
Room 1 maximum capacity set to 10
Enter exit to go to main menu
exit
```

```
mysql> select*from room_config;
```

```
+-----+-----+
| room_id | max_capacity |
+-----+-----+
|      1 |          10 |
+-----+-----+
1 row in set (0.00 sec)
```

```
--- Dashboard ---
```

1. Configure Room
2. Configure Specific Room
3. Add Occupant
4. Book Room
5. Cancel Room
6. UnConfigure Room
0. Logout

Enter your choice: 3

Enter room ID: 1

Enter number of persons: 2

Occupants added and room status updated successfully.

Returning to main menu...

```
mysql> select*from occupant;
```

```
+-----+-----+
| room_id | no_of_persons |
+-----+-----+
|      1 |          2 |
+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> select*from room_config;
```

```
+-----+-----+
| room_id | max_capacity |
+-----+-----+
|      1 |          8 |
+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> |
```

```

--- Dashboard ---
1. Configure Room
2. Configure Specific Room
3. Add Occupant
4. Book Room
5. Cancel Room
6. UnConfigure Room
0. Logout
Enter your choice: 4
Enter room ID: 1
Enter booking time (yyyy-MM-dd HH:mm:ss): 2024-07-28 02:00:00
Enter duration in minutes: 90
Room booked successfully.
Returning to main menu...

```

```

mysql> select*from room_status;
+-----+-----+-----+-----+-----+-----+-----+
| room_id | booking_status | ac_status | light_status | booking_time | leaving_time | status |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | 1 | 1 | 1 | 2024-07-28 02:00:00 | 2024-07-28 03:30:00 | occupied |
| 2 | 0 | 0 | 0 | NULL | NULL | unoccupied |
| 3 | 0 | 0 | 0 | NULL | NULL | unoccupied |
+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> select*from booked_rooms;
+-----+-----+-----+-----+
| room_id | booking_time | duration | leaving_time |
+-----+-----+-----+-----+
| 1 | 2024-07-28 02:00:00 | 90 | 2024-07-28 03:30:00 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

```

--- Dashboard ---
1. Configure Room
2. Configure Specific Room
3. Add Occupant
4. Book Room
5. Cancel Room
6. UnConfigure Room
0. Logout
Enter your choice: 5
Enter room ID: 1
Room booking and occupant information cancelled successfully.
Returning to main menu...

```

```
mysql> select*from booked_rooms;
Empty set (0.00 sec)
```

```
mysql> select*from room_status;
```

| room_id | booking_status | ac_status | light_status | booking_time | leaving_time | status     |
|---------|----------------|-----------|--------------|--------------|--------------|------------|
| 1       | 0              | 0         | 0            | NULL         | NULL         | unoccupied |
| 2       | 0              | 0         | 0            | NULL         | NULL         | unoccupied |
| 3       | 0              | 0         | 0            | NULL         | NULL         | unoccupied |

```
3 rows in set (0.00 sec)
```

Returning to main menu...

--- Dashboard ---

1. Configure Room
2. Configure Specific Room
3. Add Occupant
4. Book Room
5. Cancel Room
6. UnConfigure Room
0. Logout

Enter your choice: 3

Enter room ID: 2

Enter number of persons: 1

The total number of persons must be greater than 1.

Returning to main menu...

--- Dashboard ---

1. Configure Room
2. Configure Specific Room
3. Add Occupant
4. Book Room
5. Cancel Room
6. UnConfigure Room
0. Logout

Enter your choice: 3

Enter room ID: 4

Enter number of persons: 2

Room ID 4 does not exist.