

## CREATE TABLE

### CREATE TABLE Visitors (

```
    visitor_id INT PRIMARY KEY,  
    first_name VARCHAR(50) NOT NULL,  
    last_name VARCHAR(50) NOT NULL,  
    phone VARCHAR(20) UNIQUE,  
    email VARCHAR(100) UNIQUE,  
    passport_number VARCHAR(20) UNIQUE  
);
```

### CREATE TABLE Rooms (

```
    room_id INT PRIMARY KEY,  
    room_number INT UNIQUE NOT NULL,  
    room_type ENUM('Single', 'Double', 'Suite') NOT NULL,  
    price_per_night DECIMAL(10,2) NOT NULL,  
);
```

### CREATE TABLE Bookings (

```
    booking_id INT PRIMARY KEY,  
    visitor_id INT,  
    room_id INT,  
    check_in DATE NOT NULL,  
    check_out DATE NOT NULL,  
    total_price DECIMAL(10,2),
```

```
status ENUM('Booked', 'Checked-in', 'Checked-out', 'Cancelled') DEFAULT  
'Booked',
```

```
FOREIGN KEY (visitor_id) REFERENCES Visitors(visitor_id),
```

```
FOREIGN KEY (room_id) REFERENCES Rooms(room_id)
```

```
);
```

### INSERT

```
INSERT INTO Visitors (first_name, last_name, phone, email, passport_number)
```

```
VALUES
```

```
('Іван', 'Петренко', '+380501234567', 'ivan.petrenko@gmail.com', 'PP123456'),
```

```
('Олена', 'Коваленко', '+380671112233', 'olena.kovalenko@gmail.com',  
'PP654321'),
```

```
('John', 'Smith', '+441234567890', 'john.smith@yahoo.com', 'UK987654') ;
```

### UPDATE

```
UPDATE Visitors SET email = 'olena.kovalenko2@gmail.com'
```

```
WHERE visitor_id = 2;
```

### DELETE

```
DELETE FROM Visitors WHERE visitor_id =1;
```

### ORDER BY

```
SELECT * FROM Rooms WHERE room_type = 'Single'
```

```
ORDER BY room_id;
```

### AND

```
SELECT * FROM Visitors
```

```
WHERE first_name = 'John'
```

```
AND last_name = 'Smith';
```

## OR

```
SELECT * FROM Rooms  
  
WHERE room_type = 'Single' OR room_type = 'Suite';
```

## TOP

```
SELECT TOP 3 * FROM Visitors;
```

## MIN

```
SELECT MIN (total_price) FROM Bookings;
```

## MAX

```
SELECT MAX (total_price) FROM Bookings;
```

## COUNT

```
SELECT COUNT(*) FROM Bookings;
```

## SUM

```
SELECT SUM (total_price) FROM Bookings  
  
WHERE status = 'Checked-in';
```

## GROUP BY

```
SELECT room_type, AVG(price)  
  
FROM Rooms  
  
GROUP BY room_type;
```

## AVG

```
SELECT AVG(total_price) FROM Bookings;
```

## LIKE

```
SELECT * FROM Visitors WHERE first_name LIKE '%eH%';  
  
SELECT * FROM Visitors WHERE first_name LIKE ' J_h_';  
  
SELECT * FROM Visitors WHERE last_name LIKE 'K__B%';
```

## BETWEEN

```
SELECT * FROM Rooms
```

```
WHERE price_per_night BETWEEN 800.00 AND 1500.00;
```

## JOIN

```
SELECT v.first_name, v.last_name, r.room_number
```

```
FROM Visitors v
```

```
INNER JOIN Bookings b ON v.visitor_id = b.visitor_id
```

```
INNER JOIN Rooms r ON b.room_id = r.room_id;
```

```
SELECT v.first_name, v.last_name, b.booking_id
```

```
FROM Visitors v
```

```
LEFT JOIN Bookings b ON v.visitor_id = b.visitor_id;
```

```
SELECT b.booking_id, v.first_name
```

```
FROM Visitors v
```

```
RIGHT JOIN Bookings b ON v.visitor_id = b.visitor_id;
```