**8.Develop a web application for proficiently managing hotel reservations, employing PHP for backend logic and MySQL for data storage. The application should feature a well-structured database table encompassing essential fields such as Room Number (primary key), Room Type (e.g., single semi, single deluxe, double semi, double deluxe, dormitory), Capacity, and Status (booked or available). Within the application's user interface, provide a textbox for entering the room number and two distinct buttons for check-in and check-out functionalities. Ensure that both checkin and check-out operations are executed based on the entered room number, facilitating a seamless and intuitive user experience.**

**A. Insert 5 records into the table through interface, reflecting both available and booked rooms.**

**B. Lists all available rooms and booked rooms on the webpage.**

**C. Change the booking status to "booked" when a user checks in.**

**D. Change the room status to "available" when a user checks out.**

**E. Displays appropriate messages for successful booking, check-out, or if the room number is not present or not in the expected status.**

CREATE DATABASE partb8;

USE hotel reservation;

CREATE DATABASE partb8(room\_number INT(10),

room\_type VARCHAR(50),

capacity INT(11),

status VARCHAR(20));

<?php

$servername="localhost";

$username="root";

$password="";

$dbname="partb8";

$conn=new mysqli($servername,$username,$password,$dbname);

if($conn->connect\_error){

die("Connection failed:".$conn->connect\_error);

}

function addRecord($room\_number, $room\_type, $capacity, $status)

{

global $conn;

$sql = "INSERT INTO rooms (room\_number, room\_type, capacity, status) VALUES ('$room\_number', '$room\_type', '$capacity', '$status')";

if ($conn->query($sql)) {

echo "Record added successfully.<br>";

} else {

echo "Error: " . $sql . "<br>" . $conn->error;

}

}

function listAvailableRooms(){

global $conn;

$sql="SELECT \* FROM rooms WHERE status='available'";

$result = $conn->query($sql);

if ($result->num\_rows > 0) {

echo "<h3>Available Rooms:</h3>";

while ($row = $result->fetch\_assoc()) {

echo "Room Number: " . $row["room\_number"] . ", ";

echo "Room Type: " . $row["room\_type"] . ", ";

echo "Capacity: " . $row["capacity"] . "<br>";

}

}

else{

echo "No available rooms.";

}

}

function listBookedRooms() {

global $conn;

$sql = "SELECT \* FROM rooms WHERE status = 'booked'";

$result = $conn->query($sql);

if ($result->num\_rows > 0) {

echo "<h3>Booked Rooms:</h3>";

while ($row = $result->fetch\_assoc()) {

echo "Room Number: " . $row["room\_number"] . ", ";

echo "Room Type: " . $row["room\_type"] . ", ";

echo "Capacity: " . $row["capacity"] . "<br>";

}

} else {

echo "No booked rooms.";

}

}

function checkIn($room\_number)

{

global $conn;

$sql = "UPDATE rooms SET status = 'booked' WHERE room\_number = $room\_number";

if ($conn->query($sql))

{

if($conn->affected\_rows>0)

echo "Check-in successful for Room Number: $room\_number.<br>";

else

echo "This room is not available <br>";

}

}

function checkOut($room\_number) {

global $conn;

$sql = "UPDATE rooms SET status = 'available' WHERE room\_number = $room\_number";

if ($conn->query($sql))

{

if($conn->affected\_rows>0)

echo "Check-out successful for Room Number: $room\_number.<br>";

else

echo "This room is not available <br>";

}

}

if ($\_SERVER["REQUEST\_METHOD"] == "POST")

{

if (isset($\_POST["add\_record"]))

{

addRecord($\_POST["room\_number"], $\_POST["room\_type"], $\_POST["capacity"],$\_POST["status"]);

}

elseif (isset($\_POST["check\_in"]))

{

checkIn($\_POST["room\_number"]);

}

elseif (isset($\_POST["check\_out"]))

{

checkOut($\_POST["room\_number"]);

}

}

?>

<html>

<head>

<title>Hotel Reservation</title>

</head>

<body>

<h2>Add Record</h2>

<form method="post">

Room Number: <input type="number" name="room\_number" required><br>

<br>

Room Type:<select name="room\_type" required>

<option value="single semi">single semi</option>

<option value="single deluxe">single deluxe</option>

<option value="double semi">double semi</option>

<option value="double deluxe">double deluxe</option>

<option value="dormitory">dormitory</option>

</select>

<br><br>

Capacity: <input type="number" name="capacity" required><br><br>

Status (available/booked): <input type="text" name="status" required><br><br>

<input type="submit" name="add\_record" value="Add Record">

</form>

<h2>Check-in</h2>

<form method="post">

Room Number: <input type="number" name="room\_number" required><br>

<input type="submit" name="check\_in" value="Check-in">

</form>

<h2>Check-out</h2>

<form method="post">

Room Number: <input type="number" name="room\_number" required><br>

<input type="submit" name="check\_out" value="Check-out">

</form>

<?php listAvailableRooms(); ?>

<?php listBookedRooms(); ?>

</body>

</html>

<?php

$conn->close();

?>