

Query 1: Revenue Breakdown by Service Type

```
SELECT st.serviceName, ROUND(SUM(c.price * c.quantity), 2) AS totalRevenue
FROM Charge c
JOIN ServiceType st ON c.serviceTypeID = st.serviceTypeID
GROUP BY st.serviceName
ORDER BY totalRevenue DESC;
```

Query 2: Average Stay Duration by Room Type

```
SELECT
    rt.typeName,
    ROUND(AVG(DATEDIFF(rsv.endDate, rsv.startDate)), 1) AS avgStayDays
FROM Reservation rsv
JOIN Room rm ON rsv.roomID = rm.roomID
JOIN RoomType rt ON rm.roomTypeID = rt.roomTypeID
GROUP BY rt.typeName
ORDER BY avgStayDays DESC;
```

Query 3: Utilization Rate For Event Spaces

```
SELECT rm.roomNumber, ROUND(SUM(TIMESTAMPDIFF(HOUR, eru.actualStart,
eru.actualEnd)) / SUM(TIMESTAMPDIFF(HOUR, eru.scheduledStart, eru.scheduledEnd)) *
100, 2) AS utilizationRate

FROM EventRoomUsage eru

JOIN Room rm ON eru.roomID = rm.roomID

GROUP BY rm.roomNumber

ORDER BY utilizationRate DESC;
```

Query 4: Top Guests by Total Spend

```
SELECT g.firstName, g.lastName, SUM(c.price * c.quantity) AS totalSpend

FROM Charge c

JOIN Guest g ON c.guestID = g.guestID

GROUP BY g.guestID, g.firstName, g.lastName

ORDER BY totalSpend DESC

LIMIT 10;
```

Query 5: Average Revenue per Guest

```
SELECT g.guestID, g.firstName, g.lastName, ROUND(SUM(c.price * c.quantity) /  
COUNT(DISTINCT c.chargeID), 2) AS avgRevenuePerCharge  
  
FROM Guest g  
  
JOIN Charge c ON g.guestID = c.guestID  
  
GROUP BY g.guestID, g.firstName, g.lastName  
  
ORDER BY avgRevenuePerCharge DESC  
  
LIMIT 10;
```

Query 6: Average Occupancy Duration by Building

```
SELECT b.buildingName, ROUND(AVG(DATEDIFF(r.endDate, r.startDate)), 1) AS  
avgStayDays  
  
FROM Reservation r  
  
JOIN Room rm ON r.roomID = rm.roomID  
  
JOIN Floor f ON rm.floorID = f.floorID  
  
JOIN Wing w ON f.wingID = w.wingID  
  
JOIN Building b ON w.buildingID = b.buildingID  
  
GROUP BY b.buildingName  
  
ORDER BY avgStayDays DESC;
```

Query 7: Top Event Hosts by Number of Events

```
SELECT e.hostID, COUNT(e.eventID) AS totalEvents  
FROM Event e  
GROUP BY e.hostID  
ORDER BY totalEvents DESC  
LIMIT 10;
```

Query 8: Total Reservations per Month

```
SELECT DATE_FORMAT(r.startDate, '%Y-%m') AS month, COUNT(r.reservationID) AS  
totalReservations  
FROM Reservation r  
GROUP BY DATE_FORMAT(r.startDate, '%Y-%m')  
ORDER BY month;
```