

1. Find the class with the highest attendance

```
SELECT c.ClassID, c.ClassName, COUNT(cr.RegistrationID) AS AttendanceCount
FROM Classes c
JOIN ClassRegistrations cr ON c.ClassID = cr.ClassID
WHERE cr.Attendance = 'Y'
GROUP BY c.ClassID, c.ClassName
ORDER BY AttendanceCount DESC
FETCH FIRST 1 ROWS ONLY;
```

2. CALCULATE THE AVERAGE NUMBER OF CLASSES ATTENDED PER MEMBER

```
SELECT AVG(ClassCount) AS AverageClassesAttended
FROM (
    SELECT COUNT(cr.RegistrationID) AS ClassCount
    FROM ClassRegistrations cr
    WHERE cr.Attendance = 'Y'
    GROUP BY cr.MemberID
);
```

3. RETRIEVE THE MINIMUM NUMBER OF PARTICIPANTS IN ANY CLASS

```
SELECT MIN(ParticipantCount) AS MinimumParticipants
FROM (
    SELECT COUNT(cr.RegistrationID) AS ParticipantCount
    FROM ClassRegistrations cr
    WHERE cr.Attendance = 'Y'
    GROUP BY cr.ClassID
);
```

4. FIND THE TRAINER WITH THE HIGHEST NUMBER OF CLASSES TAUGHT

```
SELECT t.TrainerID, t.FirstName, t.LastName, COUNT(c.ClassID) AS ClassesTaught
```

```
FROM Trainers t
JOIN Classes c ON t.TrainerID = c.TrainerID
GROUP BY t.TrainerID, t.FirstName, t.LastName
ORDER BY ClassesTaught DESC
FETCH FIRST 1 ROWS ONLY;
```

5. LIST THE TOP 5 MOST POPULAR MEMBERSHIP TYPES

```
SELECT mt.MembershipTypeName, COUNT(m.MemberID) AS NumberOfMembers
FROM MembershipTypes mt
JOIN Members m ON mt.MembershipTypeID = m.MembershipTypeID
GROUP BY mt.MembershipTypeName
ORDER BY NumberOfMembers DESC
FETCH FIRST 5 ROWS ONLY;
```