**Questions And Answers On**

**Hospital-Management-System**

**1..Find Total Number of Doctors per Department?**

select departments.DepartmentName,count(doctors.DoctorID) as total\_doctors from doctors

join departments on doctors.DepartmentID=departments.DepartmentID

group by departments.DepartmentName;

**2.** **List the total number of appointments for each doctor?**

select doctors.DoctorName,count(AppointmentID) as Total\_Appointemnts from doctors

join appointments on doctors.DoctorID=appointments.DoctorID

group by doctors.DoctorName;

**3)Find the number of patients treated by each doctor, sorted by the number of patients?**

select DoctorID,count(PatientID) as No\_of\_patients from appointments

group by DoctorID

order by No\_of\_patients desc;

**4)Calculate the total number of medications prescribed in each appointment?**

select appointments.AppointmentID,count(medications.MedicationID) as Total\_medications from appointments

join medications on appointments.PatientID=medications.PatientID

group by appointments.AppointmentID;

**5)List all doctors who have treated less than 2 patients?**

select DoctorID,count(PatientID) as pateints\_treated from appointments

group by DoctorID

having pateints\_treated <2;

**6)Calculate the total number of medications prescribed by each doctor?**

**select doctors.DoctorID,count(medications.MedicationID ) as Total\_medications from doctors**

**join appointments on appointments.DoctorID=doctors.DoctorID**

**join medications on medications.PatientID=appointments.PatientID**

**group by doctors.DoctorID;**

**7) List all departments with the number of doctors in each department?**

SELECT d.DepartmentID, d.DepartmentName, COUNT(doc.DoctorID) AS NumberOfDoctors

FROM Departments d

JOIN Doctors doc ON d.DepartmentID = doc.DepartmentID

GROUP BY d.DepartmentID, d.DepartmentName;

**8)Find the total number of appointments and the total number of medications prescribed in each department?**

select dep.DepartmentName,count(a.AppointmentID) as Total\_Appointments,count(m.MedicationID) as total\_medications

FROM Departments dep

JOIN Doctors doc ON dep.DepartmentID = doc.DepartmentID

**JOIN Appointments a ON doc.DoctorID = a.DoctorID**

**JOIN Medications m ON a.AppointmentID = m.AppointmentID**

**GROUP BY dep.DepartmentName;**

**9)Calculate the number of unique patients per department using a window function?**

SELECT DepartmentID, PatientID,

COUNT(PatientID) OVER (PARTITION BY DepartmentID) AS UniquePatients

FROM Appointments a

JOIN Doctors d ON a.DoctorID = d.DoctorID;

**10)Calculate the number of appointments per day for each doctor, using a window function?**

SELECT DoctorName,AppointmentID,AppointmentDate,

COUNT(AppointmentID) OVER (partition by DoctorName) AS NO\_OF\_APPOINTEMENTS FROM doctors

JOIN appointments on doctors.DoctorID=appointments.DoctorID;