SQL PROJECT: HIMS DATA ANALYSIS

1.Patient Visited to Hospital

SELECT V.VisitID,V.OPDNumber,V.VisitDate,PC.Name AS [Patient Category],P.FirstName+' '+P.LastName AS [Patient Name],

D.FirstName+' '+D.LastName AS [Doctor Name],U.Name AS [Unit Name],DP.Name

FROM Visit V

INNER JOIN PatientCategory PC

ON V.PatientCategoryID=PC.PatientCategoryID

INNER JOIN Patient P

ON V.PatientID=P.PatientID

INNER JOIN Doctor D

ON V.DoctorID=D.DoctorID

INNER JOIN Unit U

ON V.UnitID=U.UnitID

INNER JOIN Department DP

ON D.DepartmentID=DP.DepartmentID;

	VisitID	OPDNumber	VisitDate	Patient Category	Patient Name	Doctor Name	Unit Name	Name
1	4330	4330	2022-01-25 22:20:49.510	Staff	PFname_5 PLname_5	Dr.DFname-2-3 DLname-2-3	Unit 3	Gynaecology
2	1565	1565	2022-06-09 21:53:35.827	Company	PFname_18 PLname_18	Dr.DFname-3-3 DLname-3-3	Unit 2	Medicine
3	4350	4350	2022-07-03 07:57:58.097	Staff	PFname_22 PLname_22	Dr.DFname-6-1 DLname-6-1	Unit 2	Orthopedic
4	9746	9746	2022-02-16 11:27:07.063	Staff	PFname_28 PLname_28	Dr.DFname-7-1 DLname-7-1	Unit 1	Paediatrics
5	4301	4301	2022-03-24 20:38:05.563	Staff	PFname_34 PLname_34	Dr.DFname-9-3 DLname-9-3	Unit 1	Neurology
6	4989	4989	2022-04-04 18:33:32.570	Company	PFname_35 PLname_35	Dr.DFname-4-2 DLname-4-2	Unit 5	Nephrology
7	6963	6963	2022-06-19 20:01:07.173	StaffDependent	PFname_35 PLname_35	Dr.DFname-1-2 DLname-1-2	Unit 5	Cardiology
8	6889	6889	2022-05-22 22:27:48.350	Company	PFname_45 PLname_45	Dr.DFname-11-1 DLname-11-1	Unit 4	Dental
9	6154	6154	2022-06-04 04:10:49.750	Staff	PFname_45 PLname_45	Dr.DFname-12-1 DLname-12-1	Unit 2	ENT
10	8610	8610	2022-01-11 04:18:43.710	StaffDependent	PFname_48 PLname_48	Dr.DFname-8-3 DLname-8-3	Unit 5	Physiother...
11	6436	6436	2022-01-17 09:18:59.370	StaffDependent	PFname_49 PLname_49	Dr.DFname-1-2 DLname-1-2	Unit 2	Cardiology

Query executed successfully.   SATYAJEETDC\SQLEXPRESS (16....   SATYAJEETDC\Admin (71)   HIMS   00:00:02   10,000 rows

2.Patient Admitted in Hospital

SELECT A.AdmissionDate,A.IPDNumber,

PC.Name AS PatientCategory,P.FirstName+' '+P.LastName As PatientName,D.FirstName+' '+D.LastName AS DoctorName,

U.Name As UnitName,DS.DischargeDate

FROM Admission A

INNER JOIN PatientCategory PC

ON A.PatientCategoryID=PC.PatientCategoryID

INNER JOIN Patient P

ON A.PatientId=P.PatientID

INNER JOIN Doctor D

ON A.DoctorID=D.DoctorID

INNER JOIN Unit U

ON A.UnitId=u.UnitID

INNER JOIN Discharge DS

ON A.AdmissionId=DS.AdmissionId

	AdmissionDate	IPDNumber	PatientCategory	PatientName	DoctorName	UnitName	DischargeDate
1	2022-03-06 08:38:03.293	1	StaffDependent	PFname_23947 PLname_23947	Dr.DFname-7-2 DLname-7-2	Unit 3	2022-03-14 08:38:03.293
2	2022-08-08 18:41:03.250	2	StaffDependent	PFname_28030 PLname_28030	Dr.DFname-3-2 DLname-3-2	Unit 1	2022-08-16 18:41:03.250
3	2022-01-20 16:57:38.747	3	Company	PFname_41324 PLname_41324	Dr.DFname-4-3 DLname-4-3	Unit 3	2022-01-28 16:57:38.747
4	2022-03-15 05:20:20.450	4	Staff	PFname_40439 PLname_40439	Dr.DFname-8-2 DLname-8-2	Unit 2	2022-03-23 05:20:20.450
5	2022-06-21 03:20:56.950	5	Self	PFname_32325 PLname_32325	Dr.DFname-5-3 DLname-5-3	Unit 1	2022-06-29 03:20:56.950
6	2022-07-08 20:10:30.467	6	Staff	PFname_1254 PLname_1254	Dr.DFname-9-2 DLname-9-2	Unit 5	2022-07-16 20:10:30.467
7	2022-07-28 05:32:27.943	7	Self	PFname_29531 PLname_29531	Dr.DFname-1-1 DLname-1-1	Unit 5	2022-08-05 05:32:27.943
8	2022-04-15 23:57:56.843	8	StaffDependent	PFname_13751 PLname_13751	Dr.DFname-6-2 DLname-6-2	Unit 5	2022-04-23 23:57:56.843
9	2022-07-28 07:00:42.990	9	StaffDependent	PFname_8055 PLname_8055	Dr.DFname-12-2 DLname-12-2	Unit 2	2022-08-05 07:00:42.990
10	2022-02-07 04:12:28.123	10	Staff	PFname_22518 PLname_22518	Dr.DFname-11-2 DLname-11-2	Unit 3	2022-02-15 04:12:28.123
11	2022-01-29 13:44:57.527	11	Staff	PFname_17082 PLname_17082	Dr.DFname-7-1 DLname-7-1	Unit 5	2022-02-06 13:44:57.527

Query executed successfully.   SATYAJEETDC\SQLEXPRESS (16.... | SATYAJEETDC\Admin (71) | HIMS | 00:00:01 | 1,000 rows

3.Number of Patient visited to Medicine Department in May 2022

SELECT COUNT(1) AS NumberofPatients FROM Visit V

INNER JOIN Doctor D

ON V.DoctorID=D.DoctorID

LEFT JOIN Department DP

ON D.DepartmentID=DP.DepartmentID

WHERE YEAR(VisitDate)=2022 AND MONTH(VisitDate)=05 AND DP.Name='Medicine';

	NumberofPatients
1	107

Query executed successfully.   SATYAJEETDC\SQLEXPRESS (16.... | SATYAJEETDC\Admin (72) | HIMS | 00:00:00 | 1 rows

4.List the Patient who visited as well as Admitted in Cardiology Dept for Year 2022

(A) First Method

SELECT V.PatientId AS [Patient ID of Visited Patient],A.PatientId AS [Patient ID of Admitted Patient] FROM Visit V

INNER JOIN Admission A

On V.PatientId=A.PatientId

INNER JOIN Doctor d

ON v.DoctorID=D.DoctorID

INNER JOIN Department dp

ON d.DepartmentID=dp.DepartmentID
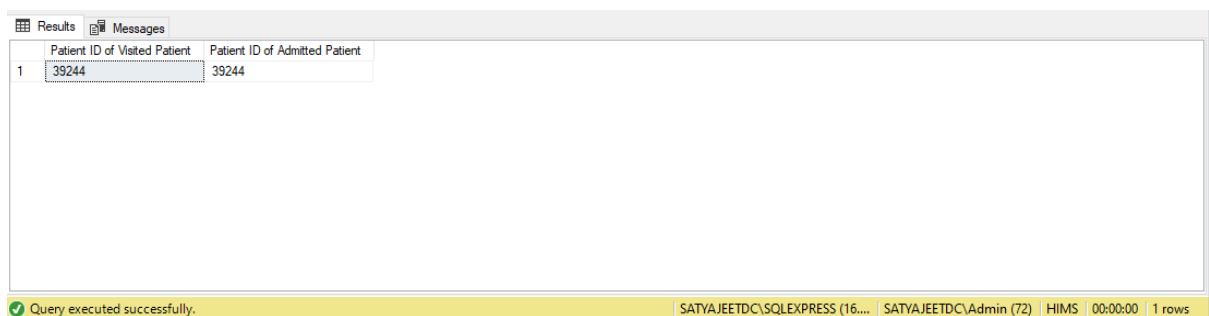
INNER JOIN Doctor d1

ON A.DoctorID=d1.DoctorID

INNER JOIN Department dp1

ON d1.DepartmentID=dp1.DepartmentID

where YEAR(VisitDate)=2022

AND dp.Name='Cardiology' AND

Year(AdmissionDate)=2022

AND dp1.Name='Cardiology';

	Patient ID of Visited Patient	Patient ID of Admitted Patient
1	39244	39244

Query executed successfully.   SATYAJEETDC\SQLEXPRESS (16....   SATYAJEETDC\Admin (72)   HIMS   00:00:00   1 rows

(B)

SELECT PatientId FROM Visit V

INNER JOIN Doctor d

ON v.DoctorID=D.DoctorID

INNER JOIN Department dp

ON d.DepartmentID=dp.DepartmentID

WHERE Year(VisitDate)=2022

AND dp.Name='Cardiology'

INTERSECT

Select PatientId

from Admission A

INNER JOIN Doctor d

ON A.DoctorID=D.DoctorID

INNER JOIN Department dp

ON d.DepartmentID=dp.DepartmentID

WHERE Year(AdmissionDate)=2022

AND dp.Name='Cardiology';

	PatientId
1	39244

Query executed successfully.   SATYAJEETDC\SQLEXPRESS (16.... | SATYAJEETDC\Admin (72) | HIMS | 00:00:00 | 1 rows

5.Year-wise & Department-wise visited Patient

SELECT YEAR(VisitDate) As Year_,dp.Name AS Department,

COUNT(PatientId) As [Patient Count] from Visit V

INNER JOIN Doctor d ON v.DoctorID=D.DoctorID

INNER JOIN Department dp ON d.DepartmentID=dp.DepartmentID

WHERE YEAR(VisitDate)=2022

GROUP BY YEAR(VisitDate),dp.Name

	Year_	Department	Patient Count
1	2022	Surgery	812
2	2022	Ophthalmology	760
3	2022	Dental	810
4	2022	Gynaecology	814
5	2022	Physiotherapy	714
6	2022	ENT	782
7	2022	Paediatrics	772
8	2022	Neurology	810

Query executed successfully.   SATYAJEETDC\SQLEXPRESS (16.... | SATYAJEETDC\Admin (72) | HIMS | 00:00:00 | 12 rows