

Count the number of items that each patient has used

The image shows two SQL queries side-by-side in a development environment. The left pane shows a query that joins the Patient and ItemCharge tables. The right pane shows a query that counts the number of items used by each patient, grouped by first name.

SQLQuery1.sql - P...HUONG\heeph (78))*

```
SELECT FirstName, ItemID
FROM ItemCharge i1
JOIN Patient p
ON p.PatientID = i1.PatientID
```

SQLQuery2.sql - P...HUONG\heeph (73))*

```
SELECT FirstName, COUNT(ItemID) AS Count_of_item
FROM ItemCharge i1
JOIN Patient p
ON p.PatientID = i1.PatientID
GROUP BY p.FirstName
```

Results for SQLQuery1.sql:

	FirstName	ItemID
1	Mason	10
2	Mason	11
3	Caleb	12
4	Avery	9
5	Oliver	18
6	Oliver	19
7	Henry	16
8	Henry	17
9	Emma	13
10	Emma	12

Results for SQLQuery2.sql:

	FirstName	Count_of_item
1	Avery	1
2	Caleb	1
3	Emma	2
4	Henry	2
5	Mason	2
6	Oliver	2

Save as sproc

SQLQuery2.sql - P...HUONG\heeph (73))*

```
CREATE PROC PatientCountItem_sproc
AS
BEGIN
SELECT FirstName, COUNT(ItemID) AS Count_of_item
FROM ItemCharge i1
JOIN Patient p
ON p.PatientID = i1.PatientID
GROUP BY p.FirstName
END
```

90 %

Messages

Commands completed successfully.

Completion time: 2023-10-13T21:59:54.9573420-04:00

Total Treatment Cost of Each Patient

SQLQuery1.sql - P...HUONG\heeph (78))*

```
SELECT p.FirstName, Treatname, Charge
FROM Patient p
JOIN TreatmentAdministration ta
ON p.PatientID = ta.PatientID
JOIN Treatment t
ON t.TreatmentID = ta.TreatmentID
```

90 %

Results Messages

	FirstName	Treatname	Charge
1	Mason	MRI	1000.00
2	Mason	X-ray	200.00
3	Evelyn	MRI	1000.00
4	Caleb	MRI	1000.00
5	Caleb	Mammogram	100.00
6	Oliver	Physical Therapy	100.00
7	Avery	X-ray	200.00
8	Henry	Dialysis	2000.00
9	Emma	Radiation Therapy	1000.00

SQLQuery2.sql - P...HUONG\heeph (73))*

```
SELECT p.FirstName, SUM(Charge) AS Treatment_cost
FROM Patient p
JOIN TreatmentAdministration ta
ON p.PatientID = ta.PatientID
JOIN Treatment t
ON t.TreatmentID = ta.TreatmentID
GROUP BY FirstName
```

90 %

Results Messages

	FirstName	Treatment_cost
1	Avery	200.00
2	Caleb	1100.00
3	Emma	1000.00
4	Evelyn	1000.00
5	Henry	2000.00
6	Mason	1200.00
7	Oliver	100.00

Save as sproc

SQLQuery2.sql - P...HUONG\heeph (73))*

```
CREATE PROC PatientTreatmentCost_sproc
AS
BEGIN
SELECT p.FirstName, SUM(Charge) AS Treatment_cost
FROM Patient p
JOIN TreatmentAdministration ta
ON p.PatientID = ta.PatientID
JOIN Treatment t
ON t.TreatmentID = ta.TreatmentID
GROUP BY FirstName
END
```

90 %

Messages

Commands completed successfully.

Completion time: 2023-10-13T22:06:32.5724581-04:00

Oldest Patient that Each Bed has

SQLQuery1.sql - P...HUONG\neepn (7/8)

```
SELECT b.BedNo, LastName, Max(Age) as Max_age
FROM Patient p
JOIN Bed b
ON p.BedNo = b.BedNo
GROUP BY b.BedNo, LastName
```

SQLQuery2.sql - P...HUONG\neepn (7/8)

```
SELECT b.BedNo, MAX(Age) as Max_age
FROM Patient p
JOIN Bed b
ON p.BedNo = b.BedNo
GROUP BY b.BedNo
```

90 %

Results Messages

	BedNo	LastName	Max_age
1	7	Armstrong	61
2	9	Eazy	33
3	11	Evans	55
4	12	Harris	21
5	16	Lewis	23
6	14	Martin	35
7	15	Smith	44
8	6	Thomas	28
9	8	Vo	26
10	12	White	78
11	8	Williams	27
12	9	Young	38

90 %

Results Messages

	BedNo	Max_age
1	6	28
2	7	61
3	8	27
4	9	38
5	11	55
6	12	78
7	14	35
8	15	44
9	16	23

Save as sproc

```
CREATE PROC MaxAgeBed_sproc
AS
BEGIN
SELECT b.BedNo, MAX(Age) as Max_age
FROM Patient p
JOIN Bed b
ON p.BedNo = b.BedNo
GROUP BY b.BedNo
END
```

0 %

Messages

Commands completed successfully.

Completion time: 2023-10-13T22:12:13.7302819-04:00

Youngest Patient of Each Doctor

SQLQuery1.sql - P...HOONG(hieeph (76))

```
SELECT p2.LastName as DoctorName, p.LastName as PatientName,  
p.Age AS PatientAge  
FROM Patient p  
JOIN TreatmentAdministration t  
ON t.PatientID = p.PatientID  
JOIN Physician p2  
ON p2.DoctorID = t.DoctorID
```

90 %

Results Messages

	DoctorName	PatientName	PatientAge
1	Green	Martin	35
2	Green	Martin	35
3	Lewis	Lewis	23
4	Thompson	Harris	21
5	Thompson	Harris	21
6	Clark	Smith	44
7	Carlson	Thomas	28
8	Scott	Young	38
9	Baker	Williams	27

SQLQuery2.sql - P...HOONG(hieeph (75))

```
SELECT p2.LastName AS DoctorName, MIN(Age) as Min_patient_age  
FROM Patient p  
JOIN TreatmentAdministration t  
ON t.PatientID = p.PatientID  
JOIN Physician p2  
ON p2.DoctorID = t.DoctorID  
GROUP BY p2.LastName
```

90 %

Results Messages

	DoctorName	Min_patient_age
1	Baker	27
2	Carlson	28
3	Clark	44
4	Green	35
5	Lewis	23
6	Scott	38
7	Thompson	21

Save as sproc

```
CREATE PROC DoctorPatientMinAge_proc
AS
BEGIN
SELECT p2.LastName AS DoctorName, MIN(Age) as Min_patient_age
FROM Patient p
JOIN TreatmentAdministration t
ON t.PatientID = p.PatientID
JOIN Physician p2
ON p2.DoctorID = t.DoctorID
GROUP BY p2.LastName
END
```

30 %

Messages

Commands completed successfully.

Completion time: 2023-10-13T22:21:52.1345022-04:00

Average Age that each doctor admitting

The image shows a side-by-side comparison of two SQL queries and their results in a database IDE.

Left Panel:

```
SELECT p2.LastName, Age
FROM Patient p
JOIN AdmitDischarge ad
ON p.PatientID = ad.PatientID
JOIN Physician p2
ON ad.AdmitDoc = p2.DoctorID
```

Results (90% zoom):

	LastName	Age
1	Green	35
2	Lewis	23
3	Thompson	21
4	Clark	44
5	Carlson	28
6	Scott	38
7	Baker	27
8	Hall	55
9	Scott	33
10	Garcia	61
11	Clark	33

Right Panel:

```
SELECT p2.LastName, AVG(Age) AS Patient_avg_age
FROM Patient p
JOIN AdmitDischarge ad
ON p.PatientID = ad.PatientID
JOIN Physician p2
ON ad.AdmitDoc = p2.DoctorID
GROUP BY p2.LastName
```

Results (90% zoom):

	LastName	Patient_avg_age
1	Baker	27
2	Carlson	28
3	Clark	38
4	Garcia	61
5	Green	35
6	Hall	55
7	Lewis	23
8	Scott	35
9	Thompson	21

Save as sproc

```
CREATE PROC DocPatientAvgAge_sproc
AS
BEGIN
SELECT p2.LastName, AVG(Age) AS Patient_avg_age
FROM Patient p
JOIN AdmitDischarge ad
ON p.PatientID = ad.PatientID
JOIN Physician p2
ON ad.AdmitDoc = p2.DoctorID
GROUP BY p2.LastName
END
```

0 %

Messages

Commands completed successfully.

Completion time: 2023-10-13T22:28:52.6814002-04:00