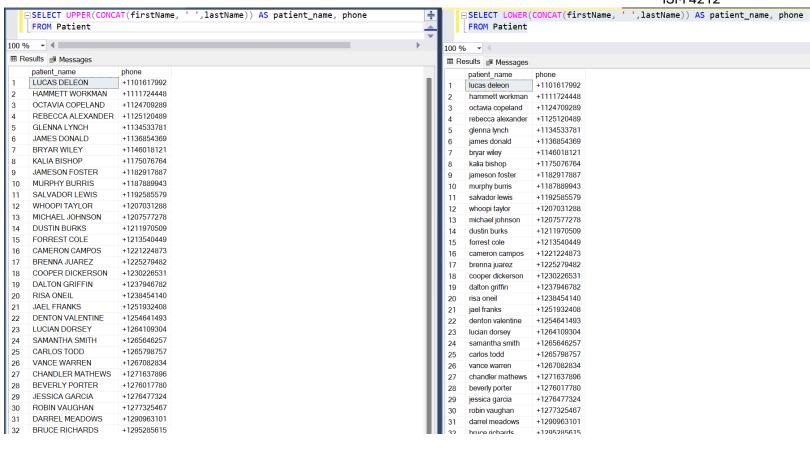
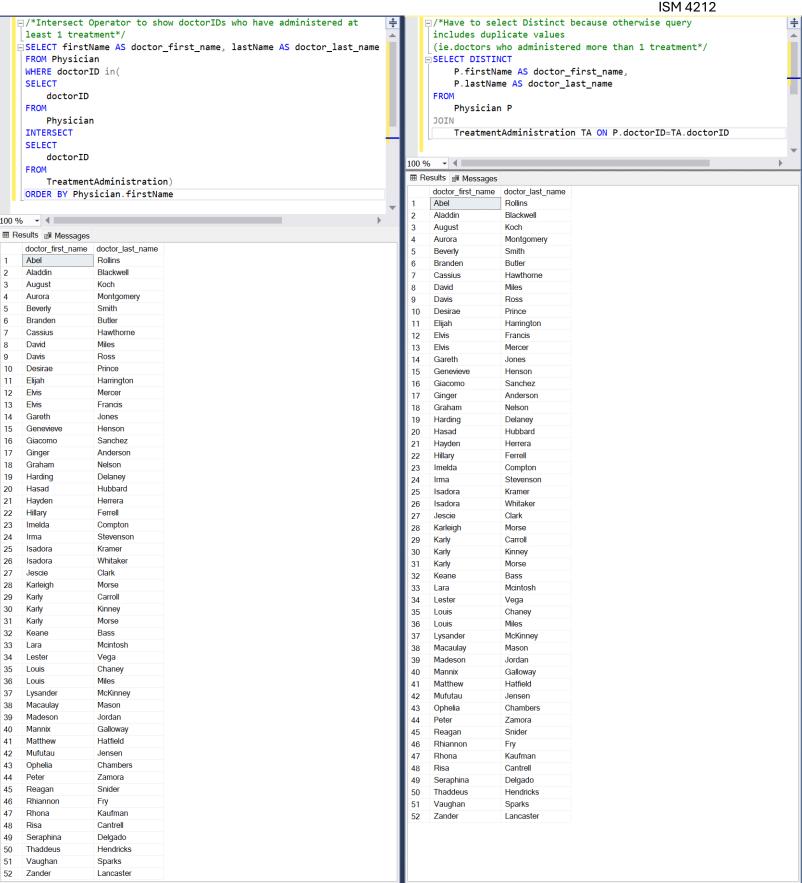
## Christian Castillo Hospital Database EXCEPT, INTERSECT, UNION OPERATORS ISM 4212



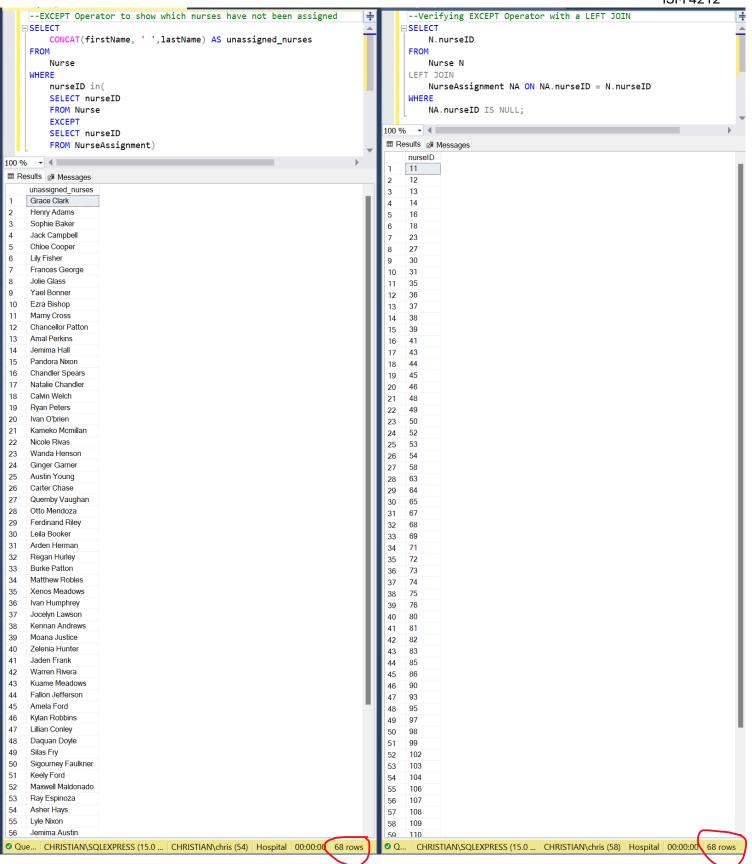
## Christian Castillo Hospital Database EXCEPT, INTERSECT, UNION OPERATORS



Quer...

CHRISTIAN\SQLEXPRESS (15.0 ... CHRISTIAN\chris (58) Hospital 00:00:00 52 rows

Query... CHRISTIAN\SQLEXPRESS (15.0 ... CHRISTIAN\chris (54) Hospital 00:00:00 52 rows



```
D/*UNION OPERATOR; THIS IS AN EXTENSION OF THE JOINS PATIENT BILL ASSIGNMENT ADDING ANOTHER QUERY USING THE UNION OPERATOR TO DISPLAY SUBTOTALS
     First Query selects a patient's Item Charges, the item's name(s), quantities, and date incurred*/
    SELECT
         P.patientNo,
            NCAT(P.firstName, ' ', P.lastName) AS patient_full_name,
         IC.date,
         I.name AS [name],
         IC.quantity as [quantity],
I.charge AS [charge]
     FROM
         ItemCharge IC
     JOIN
         Item I ON IC.itemNo = I.itemNo
         Patient P ON IC.patientNo = P.patientNo
         P.patientNo = 1
         P.patientNo, CONCAT(P.firstName, '', P.lastName), IC.date, I.name, IC.quantity, I.charge
     UNION -- Union on Second Ouery that selects a patient's Treatment Charges
     SELECT
         'Treatment' AS charge_type,
         P.patientNo,
          CONCAT(P.firstName, ' ', P.lastName),
         TA.dateTime AS date,
         T.name AS [name],
         COUNT(*) AS [quantity],-- counts each treatment as 1
T.charge AS [charge]
         TreatmentAdministration TA
     NTOL
         Treatment T ON TA.treatmentNo = T.treatmentNo
     JOIN
         Patient P ON TA.patientNo = P.patientNo
     WHERE
         P.patientNo = 1
         P.patientNo, CONCAT(P.firstName, ' ', P.lastName), TA.dateTime, T.name, T.charge
     UNION -- Union on Third Query that Takes the sum of the charges, and the sum of the quantities
     SELECT
         'Total' AS charge_type,
         P.patientNo,
         CONCAT(P.firstName, ' ', P.lastName),
         GETDATE() AS [date],
          'Amount Owed' AS [name],
         (SELECT SUM(IC.quantity) FROM ItemCharge IC WHERE IC.patientNo = P.patientNo) + (SELECT COUNT(*) FROM TreatmentAdministration TA WHERE TA.patientNo = P.patientNo) AS [quantity],
          --have to use COUNT for treatment administration because there's no quantity column in the TA table
         SUM(I.charge) + SUM(T.charge) AS charge
     FROM
         Patient P
                                                                                                                    --Passes Logic Check
         ItemCharge IC ON P.patientNo = IC.patientNo
                                                                                                                   ■ SELECT *
     JOIN
          Item I ON IC.itemNo = I.itemNo
                                                                                                                    FROM ItemCharge
                                                                                                                    WHERE patientNo=1
          TreatmentAdministration TA ON P.patientNo = TA.patientNo
     JOIN
          Treatment T ON TA.treatmentNo = T.treatmentNo
                                                                                                                    FROM TreatmentAdministration
     WHERE
                                                                                                                    WHERE patientNo=1
         P.patientNo = 1
     GROUP BY
                                                                                                              100 % - 4
          CONCAT(P.firstName, ' ', P.lastName), P.patientNo
     ORDER BY
                                                                                                               ■ Results ■ Messages
        charge ASC
                                                                                                                    chargeNo date
                                                                                                                                          quantity patientNo itemNo
100 % - 4
                                                                                                                            2024-02-01 2
                                                                                                                    4
charge_type patientNo patient_full_name date
                                                             name
                                                                           quantity
                                                                                  charge
                         James Donald
                                       2024-02-01 00:00:00.000 Strong Bandage
                                                                                   5.50
    Item
                                                                                                                    patientNo doctorID treatmentNo dateTime
                                                                                                                                                                           results
                         James Donald
                                        2024-02-01 08:15:30.000 X-ray
                                                                                   200.00
     Treatment
                                                                                                                                                    2024-02-19 08:00:00 000 Stable
                                                                                                                    1
                                                                                                                              3
                                                                                                                                        5
     Treatment 1
                         James Donald
                                        2024-02-19 08:00:00.000 Splinting
                                                                                   250.00
                                                                                                                                                    2024-02-01 08:15:30 000 Normal
                                        2024-03-02 19:02:35.857 Amount Owed
                         James Donald
```