Result - select.sql

```
GROUP 1 SELECT A
1083
          * Calculated 2019-08-28, number might be lower due to additional birthdays occurring
(1 row affected)
GROUP 1 SELECT B
-----
724
(1 row affected)
GROUP 1 SELECT C
                                                           patient_height
Thora
                             Page
(1 row affected)
GROUP 1 SELECT D
                                                           allergies
first_name
                             last_name
                                                                                                                                         patient_weight
Richie
                             Cusack
                                                                                                                                         69
Monica
                             Hamilton
                                                           NULL
                                                                                                                                         65
Sarah
Cho
                             Chang
                                                           NULL
                                                                                                                                         64
Gennady
                             Komov
                                                           NULL
Montana
                             Carlyle
                                                           NULL
                                                                                                                                         9
Mel
                             Profitt
                                                           NULL
                                                                                                                                         68
Penny
                             Fleming
                                                           NULL
                                                                                                                                         50
                             Wayne
                                                           NULL
                                                                                                                                         69
                                                                                                                                         54
Angela
                             Dayton
                                                           NULL
                                                           NULL
                                                                                                                                         61
                             Vajda
Willow
                             Rosenburg
                                                           NULL
                                                                                                                                         45
                                                           NULL
Donald
(13 rows affected)
GROUP 2 SELECT A
nursing_unit_id
1NORTH
1SOUTH
1WEST
2EAST
2NORTH
               2
2SOUTH
2WEST
(7 rows affected)
GROUP 2 SELECT B
attending_physician_id
```

7	1
8	5
9	6
10	5
11	1
12	3
13	2
16	5
17	3
18	1
19	3
20	2
21	3
22	3 2
23	2
24	1
25	2
26	3
27	3

(24 rows affected)

GROUP 2 SELECT C province_id

AB 47
BC 49
MB 31
NL 9
NS 60
QC 23
SK 13

(7 rows affected)

GROUP 2 SELECT D gender

F 328 M 1118

(2 rows affected)

GROUP 3 SELECT A

patient_id	first_name	last_name	room	bed
3216	Tiffany	Aching	5	2
2646	China	Bayles	1	1
4274	Jack	Branning	4	2
976	Sally	Cherrytree	2	1
4318	Nicky	Fairweather	1	2
2968	Sister	Guarnaccia	4	1
354	George	Stacy	5	1

(7 rows affected)

GROUP 3 SELECT B

pharmacist_initials entered_date dosage

. –	_	O
BM	2018-08-17	50MG
DDD	2019-02-28	0.25 MG
EMU	2018-08-07	30cc
JJR	2018-06-22	30 MG
RAH	2018-06-26	2 PUFFS
RES	2018-11-03	I - II TABS
RJP	2018-11-05	20MG
VK	2018-07-18	2MG

Nick Doog Nick Doog Nick Doog Nick Nick Nick Nick Nick SHOUP SELECT D Department_id dep Hou Hou Hou Nick Common Mai Acc Common Nuc Common Mai Acc Common Nuc Common Mai Acc Common Nuc Common Nuc Common Mai Acc Common Nuc Common Mai Acc Common Mai	est_name	Riviera Howser Riviera Howser Riviera Riviera Riviera Manager_f: Ellen Ellen Hillary	irst_name	nursing_ 1WEST 2EAST 2NORTH 2SOUTH 3EAST 3EAST 3WEST manager_ Crozier Crozier Crozier Bauer Brownled Cooper Brewer	_last_na	5 3 3 2 1 2 3	purchase_order_ 1 36 37 11 4	_id total_amount 	
Nick Doog Nick Doog Nick Nick Nick Nick Trows affected) ROUP 3 SELECT D epartment_id dep Hou Hou Mai Acc Lab Nuc 6 rows affected) ROUP 4 SELECT A hysician_id firs Henr 2 rows affected) ROUP 4 SELECT B atient_id first Henr 2 rows affected) ROUP 4 SELECT B atient_id first Henr 63 Ethel 646 China 004 Miner	ck ogie ck ogie ck ck ck ck ck ch ch counting counting counting custory custer Medicine counting count	Riviera Howser Riviera Howser Riviera Riviera Riviera Manager_f Ellen Ellen Hillary Judy Linda Jesse last_name Pierce		2EAST 2NORTH 2SOUTH 3EAST 3EAST 3WEST manager Crozier Crozier Bauer Brownlec Cooper Brewer Specialty	e	3 2 1 2 3	1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
Doog Nick Doog Nick Doog Nick Nick Nick Trows affected) ROUP 3 SELECT D epartment_id dep Hou Hou Mai Acc Lab Nuc 6 rows affected) ROUP 4 SELECT A hysician_id firs Henr The rows affected The	ngie ck ck ck ck ck ck cl d) department_name cusekeeping cusekeeping cintenance counting And Finance counti	Riviera Howser Riviera Riviera Riviera Riviera manager_f: Ellen Ellen Hillary Judy Linda Jesse last_name Pierce		2NORTH 2SOUTH 3EAST 3EAST 3WEST manager Crozier Crozier Bauer Brownlec Cooper Brewer Specialty	e	3 2 1 2 3	1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
Nick Doog Nick Nick Nick Nick 7 rows affected) ROUP 3 SELECT D epartment_id dep Hou Hou Mai Acc Lab Nuc 6 rows affected) ROUP 4 SELECT A hysician_id firs	ck egie ck ck ck ck cl d) epartment_name epusekeeping cusekeeping	Howser Riviera Riviera Riviera Riviera manager_f: Ellen Ellen Hillary Judy Linda Jesse last_name		2SOUTH 3EAST 3EAST 3WEST manager Crozier Crozier Bauer Brownler Cooper Brewer	e	2 1 2 3	1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
Doog Nick Nick Nick Nick Trows affected) ROUP 3 SELECT D epartment_id dep Hou Hou Mai Acc Lab Nuc Trows affected) ROUP 4 SELECT A hysician_id firs Henr Trows affected) ROUP 4 SELECT B atient_id first Trows affected	ngie ck ck ck ck d) epartment_name epusekeeping eintenance counting And Finance aboratory cclear Medicine d) cst_name enjamin ery	Howser Riviera Riviera Riviera Riviera manager_f: Ellen Ellen Hillary Judy Linda Jesse last_name		2SOUTH 3EAST 3EAST 3WEST manager Crozier Crozier Bauer Brownler Cooper Brewer	e	3	1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
Nick Nick Nick Nick 7 rows affected) ROUP 3 SELECT D epartment_id dep	ck ck ck cl d) epartment_name epusekeeping eintenance counting And Finance elboratory cclear Medicine counting	Riviera Riviera Riviera Riviera manager_f: Ellen Ellen Hillary Judy Linda Jesse last_name		3EAST 3EAST 3WEST manager Crozier Crozier Bauer Brownler Cooper Brewer	e	3	1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
Nick Nick Nick 7 rows affected) ROUP 3 SELECT D epartment_id dep Hou Hou Mai Acc Lab Nuc 6 rows affected) ROUP 4 SELECT A hysician_id firs 1 Benj 5 Henr 2 rows affected) ROUP 4 SELECT B atient_id first	ck ck cl) cpartment_name cousekeeping cusekeeping counting And Finance counting And Finance cloratory clear Medicine	Riviera Riviera Riviera manager_f: Ellen Ellen Hillary Judy Linda Jesse last_name		Manager Crozier Crozier Bauer Brownler Cooper Brewer	e	3	1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
Nick 7 rows affected) ROUP 3 SELECT D epartment_id dep	epartment_name epartment_name epusekeeping eintenance ecounting And Finance elboratory eclear Medicine	Riviera manager_f: Ellen Ellen Hillary Judy Linda Jesse last_name Pierce		manager Crozier Crozier Bauer Brownle Cooper Brewer	e	3	1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
7 rows affected) ROUP 3 SELECT D ROUP 3 SELECT D ROUP 4 SELECT A ROUP 4 SELECT A ROUP 4 SELECT A ROUP 4 SELECT B ROUP 5 SELECT B ROUP	epartment_name pusekeeping sintenance counting And Finance aboratory clear Medicine	manager_f: Ellen Ellen Hillary Judy Linda Jesse last_name		manager Crozier Crozier Bauer Brownle Cooper Brewer	e		1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
ROUP 3 SELECT D epartment_id dep Hou Hou Mai Acc Lab Nuc 6 rows affected) ROUP 4 SELECT A hysician_id firs	pusekeeping pusekeeping pusekeeping puntenance counting And Finance aboratory aclear Medicine () () () () () () () () () () () () ()	Ellen Ellen Hillary Judy Linda Jesse last_name		Crozier Crozier Bauer Brownle Cooper Brewer	e	ame	1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
epartment_id dep	epartment_name busekeeping busekeeping sintenance counting And Finance boratory sclear Medicine	Ellen Ellen Hillary Judy Linda Jesse last_name		Crozier Crozier Bauer Brownle Cooper Brewer	e	ame	1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
Hou Hou Mai Acc Lab Nuc 6 rows affected) ROUP 4 SELECT A hysician_id firs 1 Benj 5 Henr 2 rows affected) ROUP 4 SELECT B atient_id first 63 Ethel 646 China	ousekeeping ousekeeping intenance counting And Finance aboratory aclear Medicine () ost_name ary	Ellen Ellen Hillary Judy Linda Jesse last_name		Crozier Crozier Bauer Brownle Cooper Brewer	e		1 36 37 11 4	1987.20 1749.90 2282.70 3197.30 2394.60	
Hou Mai Acc Lab Nuc 6 rows affected) ROUP 4 SELECT A hysician_id firs	ousekeeping sintenance scounting And Finance sboratory sclear Medicine st_name sjamin	Hillary Judy Linda Jesse last_name Pierce		Bauer Brownled Cooper Brewer	e		37 11 4	2282.70 3197.30 2394.60	
Acc Lab Nuc 6 rows affected) GROUP 4 SELECT A chysician_id firs	nintenance counting And Finance aboratory aclear Medicine	Hillary Judy Linda Jesse last_name Pierce		Bauer Brownled Cooper Brewer	e		37 11 4	2282.70 3197.30 2394.60	
Acc Lab Nuc 6 rows affected) GROUP 4 SELECT A Chysician_id firs 1 Benj 5 Henr 2 rows affected) GROUP 4 SELECT B Catient_id first 163 Ethel 1646 China 16004 Miner	counting And Finance aboratory aclear Medicine () aclear Medicine control aclear Medicine acl	Judy Linda Jesse last_name Pierce		Brownled Cooper Brewer specialty			11 4	3197.30 2394.60	
Lab Nuc 6 rows affected) ROUP 4 SELECT A hysician_id firs 1 Benj 5 Henr 2 rows affected) ROUP 4 SELECT B atient_id first 63 Ethel 646 China 004 Miner	aboratory Iclear Medicine I) Iclear Medicine I	Linda Jesse last_name 		Cooper Brewer specialt			4	2394.60	
Nuc 6 rows affected) ROUP 4 SELECT A hysician_id firs 1 Benj 5 Henr 2 rows affected) ROUP 4 SELECT B atient_id first 63 Ethel 646 China 004 Miner	nclear Medicine () () () () () () () () () (Jesse last_name Pierce		Brewer specialt					
6 rows affected) ROUP 4 SELECT A hysician_id firs 1 Benj 5 Henr 2 rows affected) ROUP 4 SELECT B atient_id first 63 Ethel 646 China 004 Miner	n est_name njamin nry	last_name Pierce		specialt			13	17.59.50	
ROUP 4 SELECT A hysician_id firs 1 Benj 5 Henr 2 rows affected) ROUP 4 SELECT B atient_id first 63 Ethel 646 China 004 Miner	rst_name ijamin ury	Pierce							
hysician_id firs	rst_name 	Pierce							
1 Benj .5 Henr 2 rows affected) GROUP 4 SELECT B patient_id first 	njamin Iry	Pierce							
Henro Z rows affected) GROUP 4 SELECT B Datient_id first GROUP 4 SELECT B DATIENT B	nry								
(2 rows affected) GROUP 4 SELECT B Datient_id first GROUP 4 SELECT B Datient_id first Called First China GROUP Miner		Higgins		Respirol					
ROUP 4 SELECT B watient_id first 63 Ethel 646 China 004 Miner	15			Urologis [.]	t				
patient_id first 	1)								
patient_id first 	1								
2646 China 3004 Miner		last_name		nursing_u	nit_id p	primary_diagnos	sis		
3004 Miner		Veeteren		CCU		Cancer Of The S			
		Bayles		2SOUTH		Colorectal Can			
(3 rows affected)	erva	McGonagall		1NORTH	I	Fractured Right	t Humeral Head		
•	1)								
GROUP 4 SELECT C									
patient_id room		medication_descrip							
10 5	2	Atenolol							
.651 1	2	Sulfonamide							
075 4		Gentamycin (IVA)							
3 rows affected)		, ,							
GROUP 4 SELECT D)								
ourchase_order_id	d order_date quantit		tem_description						
	2018-12-03 12		atheter - No 30 Fre	ench					
	2018-12-25 4	24 S:	itz Bath						
1	2019-03-17 24		atheter - No 18 Fre	ench					
7	2019-03-29 12		atheter - No 30 Fre						
(4 rows affected)	1)								
GROUP 5 SELECT A									
ohysician	•		specialty	1	patient				primary_diagnosis
6. 33									Over Belieffer 5 of 100 Birth
Dana Scully Henry Jones			Coronary Ca	are Unit Room	Harry R:	ııey			Open Reduction Fracture Rt Humerus Congestive Heart Failure

```
Henry Blake
                                                   Coronary Care Unit Peter Moses
Remy Hadley
                                                   Pediatrics
                                                                     Minerva McGonagall
Beverly Crusher
                                                   Respirology
                                                                     John Watson
Simon Tam
                                                                     Billy Rosewood
                                                   Maternity
Leslie Winkle
                                                                     Tuppence McPherson
                                                   Psychiatry
                                                   Geriatrics
                                                                     Paul De Lena
Rajesh Koothrappali
                                                   Pediatrics
                                                                     Gerard Pitts
Lisa Cuddy
(9 rows affected)
GROUP 5 SELECT B
patient
                                                   nursing_unit_id room
                                                                           medication_description
Andy Hunter
                                                   2EAST
                                                                4
                                                                          Thorazine
                                                   3EAST
                                                                2
                                                                          Tylenol No. 2
Jack Dundee
(2 rows affected)
GROUP 6 SELECT A
patient_id primary_diagnosis
                                                    attending_physician_id
1140
         3rd Degree Burn
                                                    9
3850
         Simple Fracture Of The Tibia
(2 rows affected)
GROUP 6 SELECT B
purchase_order_id order_date department_id
-----
12
              2019-01-10 7
18
              2019-02-04 9
(2 rows affected)
```

Acute Thrombophiebitis R Leg Fractured Right Humeral Head Schizophrenia Undiagnosed Chest Pain Ca. Of Blatter Uterine Fibroid

Uterine Fibroid

SELECT Statements

```
/* Group 1 - Basic Queries */
/**************************/
PRINT 'GROUP 1 SELECT A'
SELECT COUNT(*)
FROM patients
WHERE FLOOR(DATEDIFF(DAY, birth_date, GETDATE()) / 365.25) < 18;
PRINT 'GROUP 1 SELECT B'
SELECT COUNT(*)
FROM patients
WHERE gender = 'M' AND patient_weight < (SELECT AVG(patient_weight)
                                       FROM patients
                                       WHERE gender = 'F');
PRINT 'GROUP 1 SELECT C'
SELECT TOP 1 first_name, last_name, patient_height
FROM patients
WHERE gender = 'F'
ORDER BY patient_height DESC;
PRINT 'GROUP 1 SELECT D'
SELECT first_name, last_name, allergies, patient_weight
FROM patients
WHERE province id <> 'ON' AND allergies IS NULL AND patient weight < 75;
```

```
/* Group 2 - Sub-totals using GROUP BY */
PRINT 'GROUP 2 SELECT A'
SELECT nursing_unit_id, COUNT(*)
FROM admissions
WHERE discharge_date IS NULL AND SUBSTRING(nursing_unit_id, 1, 1) IN ('1', '2')
GROUP BY nursing unit id;
PRINT 'GROUP 2 SELECT B'
SELECT attending_physician_id, COUNT(*)
FROM admissions
WHERE discharge_date IS NULL
GROUP BY attending_physician_id;
PRINT 'GROUP 2 SELECT C'
SELECT province_id, COUNT(*)
FROM patients
WHERE province id <> 'ON'
GROUP BY province_id;
PRINT 'GROUP 2 SELECT D'
SELECT gender, COUNT(*)
FROM patients
WHERE patient_height > 175
GROUP BY gender;
```

```
/* Group 3 - Two table JOINS and ORDER BY */
/**********************************/
PRINT 'GROUP 3 SELECT A'
SELECT p.patient_id, first_name, last_name, room, bed
FROM patients p
JOIN admissions a
ON p.patient_id = a.patient_id
WHERE discharge_date IS NULL AND nursing_unit_id = '2SOUTH'
ORDER BY last name;
PRINT 'GROUP 3 SELECT B'
SELECT pharmacist_initials, entered_date, dosage
FROM unit dose orders u
JOIN medications m
ON u.medication id = m.medication id
WHERE medication description LIKE '%morphine%'
ORDER BY pharmacist_initials;
PRINT 'GROUP 3 SELECT C'
SELECT physician id, first name, last name, nursing unit id, room
FROM admissions a
JOIN physicians p
ON attending_physician_id = physician_id
WHERE discharge date IS NULL AND specialty LIKE '%pediatrician%'
ORDER BY nursing unit id, room;
PRINT 'GROUP 3 SELECT D'
SELECT d.department_id, department_name, manager_first_name, manager_last_name, purchase_order_id, total_amount
FROM departments d
JOIN purchase orders p
ON d.department_id = p.department_id
WHERE total amount > 1500
ORDER BY d.department_id;
```

```
/*************************/
PRINT 'GROUP 4 SELECT A'
SELECT p.physician_id, p.first_name, p.last_name, specialty
FROM physicians p
JOIN encounters e
ON p.physician_id = e.physician_id
JOIN patients pa
ON e.patient_id = pa.patient_id
WHERE pa.first_name = 'Harry' AND pa.last_name = 'Sullivan';
PRINT 'GROUP 4 SELECT B'
SELECT p.patient_id, p.first_name, p.last_name, nursing_unit_id, primary_diagnosis
FROM patients p
JOIN admissions a
ON p.patient id = a.patient id
JOIN physicians ph
ON attending_physician_id = physician_id
WHERE discharge_date IS NULL AND specialty = 'Internist';
PRINT 'GROUP 4 SELECT C'
SELECT a.patient_id, room, bed, medication_description
FROM admissions a
JOIN unit dose orders u
ON a patient id = u patient id
JOIN medications m
ON u.medication_id = m.medication_id
WHERE discharge_date IS NULL AND nursing_unit_id = 'CCU';
PRINT 'GROUP 4 SELECT D'
SELECT po.purchase_order_id, order_date, quantity, pol.item_id, item_description
FROM purchase orders po
JOIN purchase order lines pol
ON po.purchase_order_id = pol.purchase_order_id
JOIN items i
ON pol.item id = i.item id
WHERE order status = 'ACTIVE' AND received = 0;
```

```
/**************************/
/* Group 5 - Four table JOINS */
/**************************/
PRINT 'GROUP 5 SELECT A'
SELECT p.first_name + ' ' + p.last_name physician, n.specialty, pa.first_name + ' ' + pa.last_name patient, primary_diagnosis
FROM physicians p
JOIN admissions a
ON physician id = attending physician id
JOIN nursing units n
ON a nursing unit_id = n nursing unit_id
JOIN patients pa
ON a.patient_id = pa.patient_id
WHERE discharge_date IS NULL AND secondary_diagnoses IS NULL;
PRINT 'GROUP 5 SELECT B'
SELECT p.first name + ' ' + p.last name patient, nursing unit id, room, medication description
FROM patients p
JOIN admissions a
ON p.patient id = a.patient id
JOIN unit dose orders u
ON a.patient_id = u.patient_id
JOIN medications m
ON u.medication id = m.medication id
WHERE discharge_date IS NULL AND allergies LIKE '%penicillin%';
/* Group 6 - WHERE [NOT] EXISTS */
/********************************/
PRINT 'GROUP 6 SELECT A'
SELECT patient_id, primary_diagnosis, attending_physician_id
FROM admissions a
WHERE discharge_date IS NULL AND nursing_unit_id = 'ICU' AND NOT EXISTS (SELECT *
                                                                       FROM encounters e
                                                                       WHERE a.patient id = e.patient id AND attending physician id = physician id);
PRINT 'GROUP 6 SELECT B'
SELECT purchase_order_id, order_date, department_id
FROM purchase orders po
WHERE NOT EXISTS (SELECT
                 FROM purchase order lines pol
                 WHERE po.purchase_order_id = pol.purchase_order_id);
/****************************/
/* Group 6 - WHERE [NOT] IN */
/***************************/
PRINT 'GROUP 6 SELECT A'
SELECT patient_id, primary_diagnosis, attending_physician_id
WHERE discharge date IS NULL AND nursing unit id = 'ICU' AND attending physician id NOT IN (SELECT physician id
                                                                                          FROM encounters e
                                                                                          WHERE physician_id = attending physician_id AND e.patient_id = a.patient_id);
PRINT 'GROUP 6 SELECT B'
SELECT purchase_order_id, order_date, department_id
FROM purchase orders po
WHERE purchase order id NOT IN (SELECT purchase order id
                               FROM purchase order lines);
```