

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
first_name      last_name      patient_height
-----
Thora           Page           197

(1 row affected)

GROUP 1 SELECT D
first_name      last_name      allergies      patient_weight
-----
Richie          Cusack         NULL           73
Monica          Morgan         NULL           69
Sarah           Hamilton       NULL           65
Cho             Chang          NULL           64
Gennady         Komov          NULL           7
Montana         Carlyle        NULL           9
Mel             Profitt        NULL           68
Penny          Fleming         NULL           50
Mary            Wayne          NULL           69
Angela          Dayton         NULL           54
Ben             Vajda          NULL           61
Willow          Rosenburg      NULL           45
Donald          Love           NULL           69

(13 rows affected)

GROUP 2 SELECT A
nursing_unit_id
-----
1NORTH      2
1SOUTH      4
1WEST       3
2EAST       7
2NORTH      2
2SOUTH      7
2WEST       3

(7 rows affected)

GROUP 2 SELECT B
attending_physician_id
-----
1      3
2      2
4      2
5      1
6      1
```

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	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

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

(8 rows affected)

GROUP 3 SELECT C				
physician_id	first_name	last_name	nursing_unit_id	room
8	Nick	Riviera	1WEST	5
23	Doogie	Howser	2EAST	3
8	Nick	Riviera	2NORTH	3
23	Doogie	Howser	2SOUTH	2
8	Nick	Riviera	3EAST	1
8	Nick	Riviera	3EAST	2
8	Nick	Riviera	3WEST	3

(7 rows affected)

GROUP 3 SELECT D					
department_id	department_name	manager_first_name	manager_last_name	purchase_order_id	total_amount
2	Housekeeping	Ellen	Crozier	1	1987.20
2	Housekeeping	Ellen	Crozier	36	1749.90
3	Maintenance	Hillary	Bauer	37	2282.70
4	Accounting And Finance	Judy	Brownlee	11	3197.30
7	Laboratory	Linda	Cooper	4	2394.60
9	Nuclear Medicine	Jesse	Brewer	19	1739.50

(6 rows affected)

GROUP 4 SELECT A			
physician_id	first_name	last_name	specialty
11	Benjamin	Pierce	Respirologist
15	Henry	Higgins	Urologist

(2 rows affected)

GROUP 4 SELECT B				
patient_id	first_name	last_name	nursing_unit_id	primary_diagnosis
963	Ethel	Veeteren	CCU	Cancer Of The Stomach
2646	China	Bayles	2SOUTH	Colorectal Cancer
3004	Minerva	McGonagall	1NORTH	Fractured Right Humeral Head

(3 rows affected)

GROUP 4 SELECT C			
patient_id	room	bed	medication_description
910	5	2	Atenolol
1651	1	2	Sulfonamide
4075	4	2	Gentamycin (IVA)

(3 rows affected)

GROUP 4 SELECT D				
purchase_order_id	order_date	quantity	item_id	item_description
1	2018-12-03	12	13	Catheter - No 30 French
7	2018-12-25	4	24	Sitz Bath
31	2019-03-17	24	11	Catheter - No 18 French
37	2019-03-29	12	13	Catheter - No 30 French

(4 rows affected)

GROUP 5 SELECT A			
physician	specialty	patient	primary_diagnosis
Dana Scully	Coronary Care Unit	Harry Riley	Open Reduction Fracture Rt Humerus
Henry Jones	Emergency Room	Noike Sakatsu	Congestive Heart Failure

Henry Blake	Coronary Care Unit	Peter Moses	Acute Thrombophlebitis R Leg
Remy Hadley	Pediatrics	Minerva McGonagall	Fractured Right Humeral Head
Beverly Crusher	Respirology	John Watson	Schizophrenia
Simon Tam	Maternity	Billy Rosewood	Undiagnosed Chest Pain
Leslie Winkle	Psychiatry	Tuppence McPherson	Ca. Of Bladder
Rajesh Koothrappali	Geriatrics	Paul De Lena	Uterine Fibroid
Lisa Cuddy	Pediatrics	Gerard Pitts	Uterine Fibroid
(9 rows affected)			
GROUP 5 SELECT B			
patient	nursing_unit_id	room	medication_description

Andy Hunter	2EAST	4	Thorazine
Jack Dundee	3EAST	2	Tylenol No. 2
(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	9	
(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)			

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;
```

```

/*****
/* Group 4 - Three table JOINS */
*****/
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;

```


