CSCE 413 Project 1 Fall 2003

Express the following queries in SQL using the hospital database.

SQL-Basic

1. Find the weight of Mr. Smith.
2. Find the age of Dr. Hardy.
3. Find the dates (month, day, year) of Mr. Davis' visits to the hospital.
4. Find the names of all the cardiology patients.
5. Find the names of all the patients of Dr. Cheney.
6. Find the name and weight of all cardiology patients who are over 80 kgs.
7. Find the name of the patients who are underweight.
8. Find the name of the doctors who have an underweight patient.
9. Find the names of the cardiology patients who are overweight.
10. Find the name, pound weight and inches height of each patient.
11. Find the period when Anderson is a normal weight person.
12. Find the time when Anderson and Smith have equal weight.
13. Find their weight in pounds when they have equal weight.

SQL-Sets

14. Find the names of persons who are either doctors or patients.
15. Find the names of persons who are both doctors and patients.

SQL-Aggregation

16. Find the patient id and the number of different doctors for each patient.
17. Find the patient id and the first year of visit to the hospital for each patient.

SQL-Nested

18. Find the names of the doctors who do not have any patients.
19. Find the names of the doctors whose age is less than the weight of any cardiology patient.
20. Find the id of the weight-watcher who has the least weight at the end.

PATIENT

NAME	ID	CM	KG
Anderson	100	200	130
Brown	111	150	50
Davis	222	190	90
Edwards	333	160	90
Ford	345	165	100
Hardy	454	175	70
Johnson	567	170	50
Smith	755	180	120

DOCTOR

NAME	ID	AGE	SPEC
Cheney	987	50	pediatry
Hardy	454	53	osteopathology
McBride	377	36	radiology
Miller	300	60	gynecology
Moss	244	30	neurology
Nelson	400	76	cardiology
O'Brien	181	56	urology
Paine	266	45	cardiology
Pepper	555	42	cardiology
Snow	500	65	radilogy

VISIT

PID	DID	MONTH	DAY	YEAR
100	555	6	30	1999
100	181	5	20	2001
111	987	8	20	2002
111	987	5	28	2003
222	266	9	12	2000
222	400	5	20	2001
222	555	5	20	2001
333	987	6	23	2003
345	300	5	16	2000
454	244	1	18	2002
567	454	5	28	2003
567	377	2	20	2003
755	987	6	23	2003

WEIGHT

KG	LB	
k	l	$2.2k = l$

HEIGHT

CM	IN	
c	i	$0.39c = in$

WEIGHT-WATCHER

ID	KG	MONTH	
100	y	t	$y = -6t + 130, \ \ 0 \leq t, \ \ t \leq 5$
100	y	t	$y = -2t + 110, \ \ 5 \leq t, \ \ t \leq 12$
755	y	t	$y = -2t + 120, \ \ 0 \leq t, \ \ t \leq 12$

WEIGHT-PERCENT

PERCENT	CM	KG	
95	x	y	$y = x - 80$
50	x	y	$y = 0.833x - 66.66$
5	x	y	$y = 0.666x - 53.33$

FIT

TYPE	CM	KG	
overweight	x	y	$y > x - 80$
normal	x	y	$y \leq x - 80, \ \ y \geq 0.66x - 53.33$
underweight	x	y	$y < 0.66x - 53.33$