


Question 1:

1. "Student" Schema and Table:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	snum 	decimal(9,0)			No	None		
2	sname	varchar(30)	utf8mb4_general_ci		Yes	NULL		
3	major	varchar(25)	utf8mb4_general_ci		Yes	NULL		
4	level	varchar(2)	utf8mb4_general_ci		Yes	NULL		
5	age	decimal(3,0)			Yes	NULL		

snum	sname	major	level	age
51135593	Maria White	English	SR	21
60839453	Charles Harris	Architecture	SR	22
99354543	Susan Martin	Law	JR	20
112348546	Joseph Thompson	Computer Science	SO	19
115987938	Christopher Garcia	Computer Science	JR	20
132977562	Angela Martinez	History	SR	20
269734834	Thomas Robinson	Psychology	SO	18
280158572	Margaret Clark	Animal Science	FR	18
301221823	Juan Rodriguez	Psychology	JR	20
318548912	Dorothy Lewis	Finance	FR	18
320874981	Daniel Lee	Electrical Engineering	FR	17
322654189	Lisa Walker	Computer Science	SO	17
348121549	Paul Hall	Computer Science	JR	18
351565322	Nancy Allen	Accounting	JR	19
451519864	Mark Young	Finance	FR	18
455798411	Luis Hernandez	Electrical Engineering	FR	17
462156489	Donald King	Mechanical Engineering	SO	19
550156548	George Wright	Education	SR	21
552455318	Ana Lopez	Computer Engineering	SR	19
556784565	Kenneth Hill	Civil Engineering	SR	21
567354612	Karen Scott	Computer Engineering	FR	18
573284895	Steven Green	Kinesiology	SO	19
574489456	Betty Adams	Economics	JR	20
578875478	Edward Baker	Veterinary Medicine	SR	21

2. “Department” Schema and Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	fid 🔑	decimal(9,0)			No	None		
2	fname	varchar(30)	utf8mb4_general_ci		Yes	NULL		
3	deptid	decimal(2,0)			Yes	NULL		



fid	fname	deptid
90873519	Elizabeth Taylor	11
142519864	Ivana Teach	20
242518965	James Smith	68
248965255	Barbara Wilson	12
254099823	Patricia Jones	68
287321212	Michael Miller	12
489221823	Richard Jackson	33
489456522	Linda Davis	20
548977562	Ulysses Teach	20

3. “Course” Schema and Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	snum 🔑	decimal(9,0)			No	None		
2	cname 🔑 🔒	varchar(40)	utf8mb4_general_ci		No	None		

snum	cname
99354543	Patent Law
112348546	Database Systems
112348546	Operating System Design
115987938	Database Systems
115987938	Operating System Design
301221823	American Political Parties
301221823	Perception
301221823	Social Cognition
322654189	Database Systems
322654189	Operating System Design
348121549	Database Systems
455798411	Operating System Design
455798411	Optical Electronics
552455318	Communication Networks
552455318	Database Systems
552455318	Operating System Design
556784565	Air Quality Engineering
567354612	Data Structures
567354612	Operating System Design
574489456	Urban Economics


4. "Class" Schema and Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	name 	varchar(40)	utf8mb4_general_ci		No	None		
2	meets_at	varchar(20)	utf8mb4_general_ci		Yes	NULL		
3	room	varchar(10)	utf8mb4_general_ci		Yes	NULL		
4	fid 	decimal(9,0)			Yes	NULL		

name	meets_at	room	fid
Air Quality Engineering	TuTh 10:30-11:45	R15	11564812
American Political Parties	TuTh 2-3:15	20 AVW	619023588
Archaeology of the Incas	MWF 3-4:15	R128	248965255
Aviation Accident Investigation	TuTh 1-2:50	Q3	11564812
Communication Networks	MW 9:30-10:45	20 AVW	141582651
Dairy Herd Management	TuTh 12:30-1:45	R128	356187925
Data Structures	MWF 10	R128	489456522
Database Systems	MWF 12:30-1:45	1320 DCL	142519864
Introduction to Math	TuTh 8-9:30	R128	489221823
Introductory Latin	MWF 3-4:15	R12	248965255
Marketing Research	MW 10-11:15	1320 DCL	489221823
Multivariate Analysis	TuTh 2-3:15	R15	90873519
Operating System Design	TuTh 12-1:20	20 AVW	489456522
Optical Electronics	TuTh 12:30-1:45	R15	254099823
Orbital Mechanics	MWF 8	1320 DCL	11564812
Organic Chemistry	TuTh 12:30-1:45	R12	489221823
Patent Law	F 1-2:50	R128	90873519
Perception	MTuWTh 3	Q3	489221823
Seminar in American Art	M 4	R15	489221823
Social Cognition	Tu 6:30-8:40	R15	159542516
Urban Economics	MWF 11	20 AVW	489221823


Question 2:

1. "Provider" Schema and Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	sid 	int(9)			No	None		
2	sname	varchar(30)	utf8mb4_general_ci		Yes	NULL		
3	address	varchar(40)	utf8mb4_general_ci		Yes	NULL		

sid	sname	address
1	Acme Widget Suppliers	1 Grub St., Potemkin Village, IL 61801
2	Big Red Tool and Die	4 My Way, Bermuda Shorts, OR 90305
3	Perfunctory Parts	99999 Short Pier, Terra Del Fuego, TX 41
4	Alien Aircraft Inc.	2 Groom Lake, Rachel, NV 51902

2. "Goodies" Schema and Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	pid 	int(9)			No	None		
2	pname	varchar(40)	utf8mb4_general_ci		Yes	NULL		
3	color	varchar(15)	utf8mb4_general_ci		Yes	NULL		

pid	pname	color
1	Left Handed Bacon Stretcher Cover	Red
2	Smoke Shifter End	Black
3	Acme Widget Washer	Red
4	Acme Widget Washer	Silver
5	I Brake for Crop Circles Sticker	Translucent
6	Anti-Gravity Turbine Generator	Cyan
7	Anti-Gravity Turbine Generator	Magenta
8	Fire Hydrant Cap	Red
9	7 Segment Display	Green

3. "Stock" Schema and Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	sid 🔑	int(9)			No	None		
2	pid 🔑 🔑	int(9)			No	None		
3	cost	int(10)			Yes	NULL		

sid	pid	cost
1	3	1
1	4	1
1	8	12
2	1	17
2	3	1
2	8	8
3	8	13
3	9	1
4	5	2
4	6	1247548
4	7	1247548