

```

4 • create table `student` (
5     `sid` INT UNSIGNED NOT NULL auto_increment,
6     `name` VARCHAR(45) NOT NULL,
7     `class_rank` VARCHAR(2) NOT NULL,
8     `major` VARCHAR(5) NOT NULL,
9     `advisor` INT UNSIGNED NOT NULL,
10    PRIMARY KEY (`sid`),
11    UNIQUE INDEX `sid_UNIQUE` (`sid` ASC) visible);
12 • insert into student (sid, name, class_rank, major, advisor) values (17352, 'John Smith', 'SR',
13 • insert into student (sid, name, class_rank, major, advisor) values (19407, 'Prashant Kumar', 'J
14 • insert into student (sid, name, class_rank, major, advisor) values (22458, 'Rene Lopez', 'SO',
15 • insert into student (sid, name, class_rank, major, advisor) values (24357, 'Rachel Adams', 'FR
16 • insert into student (sid, name, class_rank, major, advisor) values (27783, 'Julia Zhao', 'FR',
17 • select * from student;
18

```

sid	name	class_rank	major	advisor
17352	John Smith	SR	SWENG	1186
19407	Prashant Kumar	JR	CMPSC	3572
22458	Rene Lopez	SO	SWENG	2842
24357	Rachel Adams	FR	CMPSC	4235
27783	Julia Zhao	FR	SWENG	3983
NULL	NULL	NULL	NULL	NULL

```

21 • CREATE TABLE faculty (
22     `fid` INT UNSIGNED NOT NULL auto_increment,
23     `name` VARCHAR(45) NOT NULL,
24     `department` VARCHAR(5) NOT NULL,
25     PRIMARY KEY (`fid`),
26     UNIQUE INDEX `fid_UNIQUE` (`fid` ASC) visible);
27 • INSERT INTO faculty(fid, name, department) VALUES (2469, 'Huei Chuang', 'CMPSC');
28 • INSERT INTO faculty(fid, name, department) VALUES (5368, 'Christopher Johnson', 'MATH');
29 • INSERT INTO faculty(fid, name, department) VALUES (6721, 'Sanjay Gupta', 'SWENG');
30 • INSERT INTO faculty(fid, name, department) VALUES (7497, 'Martha Simons', 'SWENG');
31 • SELECT * FROM faculty;
32
33

```

fid	name	department
2469	Huei Chuang	CMPSC
5368	Christopher Johnson	MATH
6721	Sanjay Gupta	SWENG
7497	Martha Simons	SWENG
NULL	NULL	NULL

```

34
35 • CREATE TABLE department(
36     `code` VARCHAR(5) NOT NULL,
37     `name` VARCHAR(45) NOT NULL,
38     `building` VARCHAR(45) NOT NULL,
39     PRIMARY KEY (`code`));
40 • INSERT INTO department(code, name, building) VALUES('CMPSC', 'Computer Science', 'Hopper Center
41 • INSERT INTO department (code, name, building) VALUES ('MATH', 'Mathematics', 'Nittany Hall');
42 • INSERT INTO department (code, name, building) VALUES ('SWENG', 'Software Engineering', 'Hopper
43 • SELECT*FROM department;
44
45

```

code	name	building
CMPSC	Computer Science	Hopper Center
MATH	Mathematics	Nittany Hall
SWENG	Software Engineering	Hopper Hall
* NULL	NULL	NULL

```

46 • CREATE TABLE course(
47     `number` VARCHAR(8) NOT NULL,
48     `name` VARCHAR(45) NOT NULL,
49     `c_hours` INT UNSIGNED NOT NULL,
50     `department` VARCHAR(5) NOT NULL,
51     PRIMARY KEY (`number`));
52 • INSERT INTO course(number, name, c_hours, department) VALUES('CMPSC121', 'Introduction to Prog
53 • INSERT INTO course(number, name, c_hours, department) VALUES ('CMPSC122', 'Intermediate Program
54 • INSERT INTO course(number, name, c_hours, department) VALUES('MATH 140', 'Calaculus with Analy
55 • INSERT INTO course (number, name, c_hours, department) VALUES ('SWENG311', 'O-O Software Desig
56 • SELECT * FROM course;
57
58
59

```

number	name	c_hours	department
CMPSC121	Introduction to Programming	3	CMPSC
CMPSC122	Intermediate Programming	3	CMPSC
MATH 140	Calaculus with Analytical Geometry	4	MATH
SWENG311	O-O Software Design and Construction	3	SWENG
* NULL	NULL	NULL	NULL

```

61 • CREATE TABLE section(
62     `secid` INT UNSIGNED NOT NULL auto_increment,
63     `cnum` VARCHAR(45) NOT NULL,
64     `semester` VARCHAR(6) NOT NULL,
65     `year` YEAR NOT NULL,
66     PRIMARY KEY (`secid`),
67     UNIQUE INDEX `secid_UNIQUE` (`secid` ASC) visible);
68 • INSERT INTO section(secid, cnum, semester, year)VALUES(044592, 'CMPSC121', 'Fall', 2017);
69 • INSERT INTO section (secid, cnum, semester, year) VALUES (046879, 'MATH140', 'Fall', 2017);
70 • INSERT INTO section (secid, cnum, semester, year) VALUES (059834, 'CMPSC122', 'Spring', 2018);
71 • INSERT INTO section (secid, cnum, semester, year) VALUES(071840, 'MATH140', 'Spring', 2018);
72 • INSERT INTO section (secid, cnum, semester, year) VALUES(063256, 'CMPSC121', 'Fall', 2018);
73 • INSERT INTO section (secid, cnum, semester, year) VALUES (063593, 'SWENG311', 'Fall', 2018);
74 • SELECT*FROM section;
75

```

Result Grid	Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:	Form Editor
secid	cnum	semester	year		
44592	CMPSC121	Fall	2017		
46879	MATH140	Fall	2017		
59834	CMPSC122	Spring	2018		
63256	CMPSC121	Fall	2018		
63593	SWENG311	Fall	2018		
71840	MATH140	Spring	2018		
NULL	NULL	NULL	NULL		

```

76 • CREATE TABLE transcript (
77     `sid` INT UNSIGNED NOT NULL,
78     `secid` INT UNSIGNED NOT NULL,
79     `grade` CHAR NULL);
80 • INSERT INTO transcript(sid, secid, grade) VALUES(22458,044592, 'A');
81 • INSERT INTO transcript(sid, secid, grade) VALUES (22458, 046879,'B');
82 • INSERT INTO transcript(sid, secid, grade) VALUES (22458, 059834, 'A');
83 • INSERT INTO transcript(sid, secid, grade) VALUES (22458, 063256, 'C');
84 • INSERT INTO transcript(sid, secid, grade) VALUES(24356, 061340, 'A');
85 • INSERT INTO transcript(sid,secid, grade) VALUES(24356, 063256, 'B');
86 • SELECT* FROM transcript;

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
sid	secid	grade	
22458	44592	A	
22458	46879	B	
22458	59834	A	
22458	63256	C	
24356	61340	A	
24356	63256	B	