

University Database

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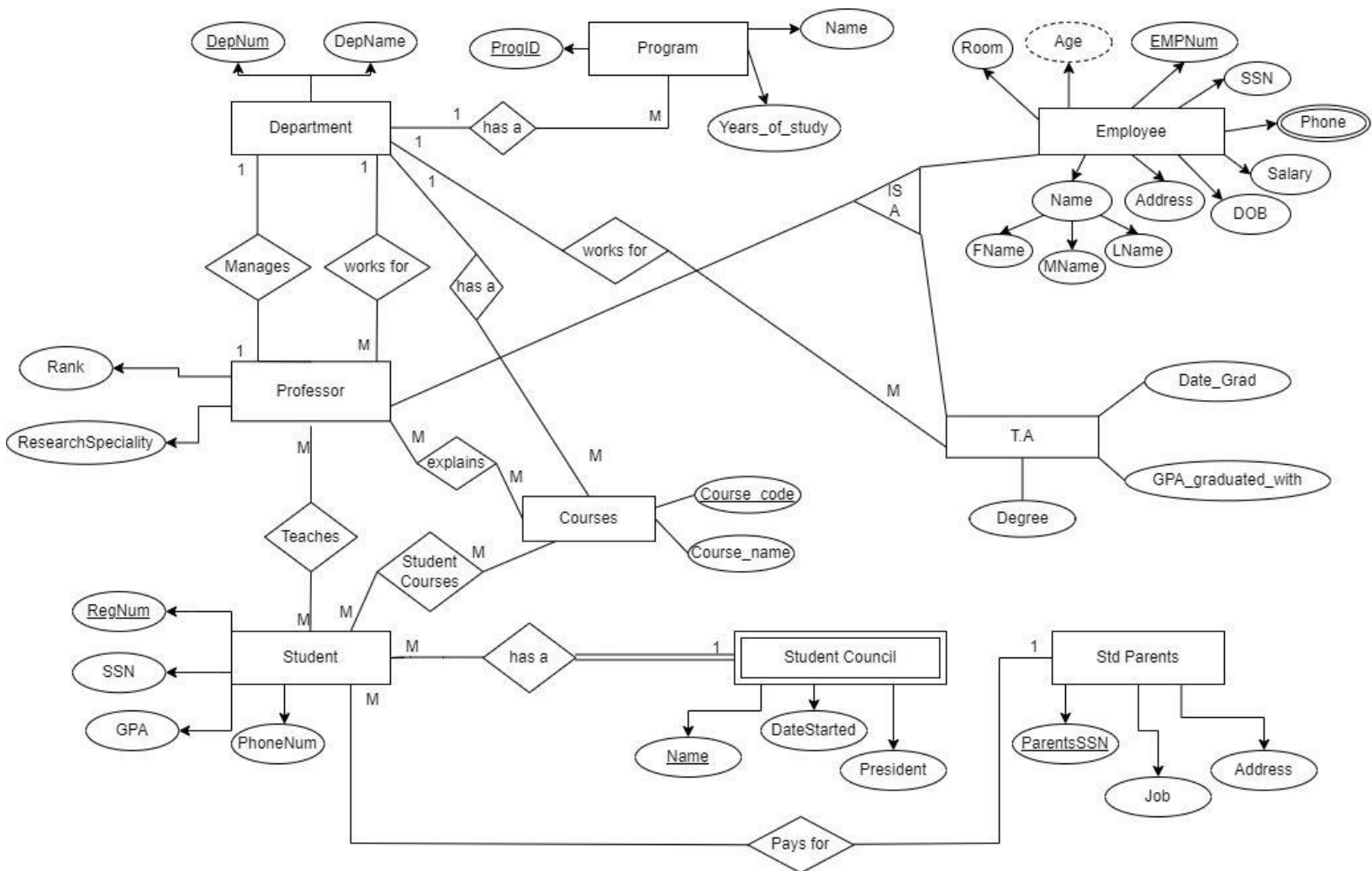
Idea: -

University database that shows and describes how the system works for students and university staff.

Business rules:-

- Each department is identified department number and has a department name
- All employees including professors and teaching assistants have an SSN , address and are identified by employee number
- Employee has a name, which consists of first, middle and last name, date of birth, age, address, room, salary and multiple phone numbers
- Program is identified by program-id and has years of study and a name
- Professor has a research specialty and a rank
- Teaching assistant has a date graduated, GPA graduated with, degree
- Student is identified by Registration number and has a GPA , SSN and multiple phone
- Course is identified by a course code and has a course name
- Student parents are identified by SSN and has a job and address
- Student council has a date started, key attribute of name and president
- Each department has a program and is managed by a professor
- Each professor works for only one department
- An employee called supervisor supervises employees
- Each department has courses
- Each course may be explained by at least one professor
- Student may be taught by one or more professor
- Each student takes at least one course and each course may be taken by many students
- Parents pay for one or more student but student is paid by one parent
- Student council has many students and a student has only one student council
- Each department has at least one course but a course has only one department
- Each teaching assistant works for only one department

ERD: -



Department

<u>DepNum</u>	DepName	EmpNum
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Professor

<u>EmpNum</u>	Rank	ResearchSpeciality	DepNum	Fname	Mname	Lname	Address	DOB	Salary	Room	SSN
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Program

<u>ProgID</u>	years_of_study	Name	DepNum
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Course

<u>Course_code</u>	Course_name	DepNum
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Teaching_Assistant

<u>EmpNum</u>	Date_Grad	GPA_graduated_with	Degree	DepNum	Fname	Mname	Lname	Address	DOB	Salary	Room	SSN
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Professor explains

<u>EmpNum</u>	<u>Course_code</u>
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Student

<u>RegNum</u>	GPA	PhoneNum	ParentsSSN	SSN
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Professor Teaches

<u>RegNum</u>	<u>EmpNum</u>
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Stud_council

<u>Name</u>	<u>RegNum</u>	President	DateStarted
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Stud_parents

<u>ParentsSSN</u>	job	Address
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Professor Phone Number

<u>Phone</u>	<u>EmpNum</u>
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TA Phone Number

<u>Phone</u>	<u>EmpNum</u>
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Student Courses

<u>RegNum</u>	<u>Course_code</u>
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Screenshots:-

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'university_database' schema with various tables listed. The main query editor shows a query: `SELECT * FROM university_database.course;`. The 'Result Grid' displays the following data:

course_code	course_name	dept_num
cc305	Data security	10
ec303	Electronics 2	20
ee300	circuits 2	40
im300	Industrial relations	30
me333	Mechanics 2	50

The 'Output' pane shows the execution details: `1 02:30:08 SELECT * FROM university_database.course LIMIT 0, 1000` with a message '5 row(s) returned' and a duration of '0.000 sec / 0.000 sec'.

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'university_database' schema with various tables listed. The main query editor shows a query: `SELECT * FROM university_database.department;`. The 'Result Grid' displays the following data:

dept_num	deptname
10	computer
40	electrical
20	electronics
30	industrial
50	mechanical

The 'Output' pane shows the execution details: `1 02:30:08 SELECT * FROM university_database.course LIMIT 0, 1000` with a message '5 row(s) returned' and a duration of '0.000 sec / 0.000 sec'. A second entry shows: `2 02:30:28 SELECT * FROM university_database.department LIMIT 0, 1000` with a message '5 row(s) returned' and a duration of '0.000 sec / 0.000 sec'.

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- mydatabase
- scout
- sql_hr
- sql_inventory
- sql_invoicing
- sql_store
- sys
- university_database
 - Tables
 - course
 - department
 - department_mgr
 - prof_phonenumber
 - professor_explains
 - professor_teaches
 - professor
 - program
 - stud_council
 - stud_courses
 - stud_parents

Administration Schemas

Information

Schema: university_database

Query 1 department_mgr

```
1 * SELECT * FROM university_database.department_mgr;
```

Result Grid

dept_num	mgr
10	1510012
50	1510013
20	1510016
30	1510017
40	1510019

Output

Action Output

#	Time	Action	Message	Duration / Fetch
2	02:30:28	SELECT * FROM university_database.department LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
3	02:30:52	SELECT * FROM university_database.department_mgr LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80 x

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 - stud_council
 - stud_courses
 - stud_parents

Administration Schemas

Information

Schema: university_database

Query 1 department_mgr prof_phonenumber

```
1 * SELECT * FROM university_database.prof_phonenumber;
```

Result Grid

phone	empno
196374804	1510012
1018189065	1510013
11847486	1510019
12848567	1510019

Output

Action Output

#	Time	Action	Message	Duration / Fetch
3	02:30:52	SELECT * FROM university_database.department_mgr LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
4	02:31:15	SELECT * FROM university_database.prof_phonenumber LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

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 - stud_courses
 - stud_parents

Administration Schemas

Information

Schema: university_database

Query 1 department_mgr prof_phonenumber professor_explains

1 • SELECT * FROM university_database.professor_explains;

Result Grid

empnum	course_code
1510012	cc305
1510013	cc305
1510012	ec303
1510019	ec303
1510019	ee300
more	more

professor_explains 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
4	02:31:15	SELECT * FROM university_database.prof_phonenumber LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
5	02:31:28	SELECT * FROM university_database.professor_explains LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

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 - professor_explains
 - professor_teaches
 - professor
 - program
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 - stud_courses
 - stud_parents

Administration Schemas

Information

Schema: university_database

Query 1 department_mgr prof_phonenumber professor_explains professor_teaches

1 • SELECT * FROM university_database.professor_teaches;

Result Grid

regno	empno
19100111	1510012
19100222	1510013
19100018	1510019
19100111	1510019
more	more

professor_teaches 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
5	02:31:28	SELECT * FROM university_database.professor_explains LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
6	02:31:42	SELECT * FROM university_database.professor_teaches LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80 x

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 - prof_phonenumber
 - professor_explains
 - professor_teaches
 - professor
 - program
 - stud_council
 - stud_courses
 - stud_parents

Administration Schemas

Information

Schema: university_database

Query 1 department_mgr prof_phonenumber professor_explains professor_teaches professor

```
1 * SELECT * FROM university_database.professor;
```

Result Grid

empnum	ranking	research_specialty	fname	lname	address	Date_of_birth	Salary	room	san	deptnum
1510012	Professor	Maths	Mohamed	Nasser	Elmaghraby	Alexandria	2001-05-14	50000	203g	1221345678
1510013	associate Professor	data security	Mohamed	Nasser	taman	Alexandria	2001-11-29	40000	204g	1221345678
1510014	assistant Professor	Electric circuits	abdelrahman	ahmed	mazhar	Cairo	2001-06-13	30000	203g	1221345679
1510016	instructor	Microprocessors	Mahmoud	ahmed	shosha	Giza	1999-04-16	20000	205g	1221345698
1510017	instructor	Transistors	youssef	Nasser	Elshikh	dahab	1999-05-19	20000	203	1221345978
1510019	instructor	Database manegment	mahmoud	Nasser	Elsafy	Alexandria	1999-07-14	20000	111	1221395678

professor 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
6	02:31:42	SELECT * FROM university_database professor_teaches LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
7	02:32:01	SELECT * FROM university_database professor LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80 x

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 - professor_explains
 - professor_teaches
 - professor
 - program
 - stud_council
 - stud_courses
 - stud_parents

Administration Schemas

Information

Schema: university_database

Query 1 department_mgr prof_phonenumber professor_explains professor_teaches professor program

```
1 * SELECT * FROM university_database.program;
```

Result Grid

prog_id	years_of_study	prog_name	dept_num
244	3	Data science	10
502	2	Engineering	10
11263	1	cyber security	20
11475	2	Medicine	20
22103	1	Engineering economy	30
22366	1	Physical Education	30

program 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
7	02:32:01	SELECT * FROM university_database professor LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
8	02:32:15	SELECT * FROM university_database program LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80 x

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Navigator

SCHEMAS

Filter objects

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 - department
 - department_mgr
 - prof_phonenumber
 - professor_explains
 - professor_teaches
 - professor
 - program
 - stud_council
 - stud_courses
 - stud_parents

Administration Schemas

Information

Schema: university_database

Query 1 department_mgr prof_phonenumber professor_explains professor_teaches professor program stud_council

1 • SELECT * FROM university_database.stud_council;

Result Grid

s_name	regno	president	datestarted
alpha	19100111	yehia Mohamed	2020-06-17
beta	19100222	omar wald	2020-05-18
gamma	19100018	abdalah wald	2022-01-01
uno	19105876	youssef mohamed	2023-01-01

stud_council 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
8	02:32:15	SELECT * FROM university_database program LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
9	02:32:28	SELECT * FROM university_database stud_council LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- mydatabase
- scout
- sql_hr
- sql_inventory
- sql_invoicing
- sql_store
- sys
- university_database
 - Tables
 - course
 - department
 - department_mgr
 - prof_phonenumber
 - professor_explains
 - professor_teaches
 - professor
 - program
 - stud_council
 - stud_courses
 - stud_parents

Administration Schemas

Information

Schema: university_database

Query 1 department_mgr prof_phonenumber professor_explains professor_teaches professor program stud_council stud_courses

1 • SELECT * FROM university_database.stud_courses;

Result Grid

regno	course_code
19100018	cc305
19100111	ec305
19100018	ec303
19100111	ec303
19100222	ee300
19105876	ee300
19100222	ms300
19105876	ms300

stud_courses 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
9	02:32:28	SELECT * FROM university_database stud_council LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
10	02:32:41	SELECT * FROM university_database stud_courses LIMIT 0, 1000	8 row(s) returned	0.016 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- mydatabase
- scout
- sql_hr
- sql_inventory
- sql_invoicing
- sql_store
- sys
- university_database
 - Tables
 - course
 - department
 - department_mgr
 - prof_phonenumber
 - professor_explains
 - professor_teaches
 - professor
 - program
 - stud_council
 - stud_courses
 - stud_parents

Administration Schemas

Information

Schema: university_database

Query 1 department_mgr prof_phonenumber professor_explains professor_teaches professor program stud_council stud_courses stud_parents

1 SELECT * FROM university_database.stud_parents;

Result Grid

parent_ssn	job	address
267493	Coach	Sporting
420885	Doctor	Louran
587492	Engineer	Smouha
741963	Scientist	Asafa

stud_parents 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
10	02:32:41	SELECT * FROM university_database.stud_courses LIMIT 0, 1000	8 row(s) returned	0.016 sec / 0.000 sec
11	02:32:55	SELECT * FROM university_database.stud_parents LIMIT 0, 1000	4 row(s) returned	0.016 sec / 0.000 sec

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- sys
- university_database
 - Tables
 - course
 - department
 - department_mgr
 - prof_phonenumber
 - professor_explains
 - professor_teaches
 - professor
 - program
 - stud_council
 - stud_courses
 - stud_parents
 - student
 - ta_phonenumber
 - teaching_assistant
 - Views
 - Stored Procedures
 - Functions

Administration Schemas

Information

Schema: university_database

Query 1 department_mgr prof_phonenumber professor_explains professor_teaches professor program stud_council stud_courses stud_parents student

1 SELECT * FROM university_database.student;

Result Grid

regno	GPA	phone_num	ssn	parent_ssn
19100018	3.40	1236698746	815698	587492
19100111	3.90	1154986327	336520	420885
19100222	3.80	1556698523	563278	741963
19105876	3.60	1004933752	639874	267493

student 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
11	02:32:55	SELECT * FROM university_database.stud_parents LIMIT 0, 1000	4 row(s) returned	0.016 sec / 0.000 sec
12	02:33:13	SELECT * FROM university_database.student LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

sys

university_database

course

department

department_mgr

prof_phonenumber

professor_explains

professor_teaches

professor

program

stud_council

stud_courses

stud_parents

student

ta_phonenumber

teaching_assistant

Views

Stored Procedures

Functions

Administration Schemas

Information

Schema: university_database

Query 1

department_mgr prof_phonenumber professor_explains professor_teaches professor program stud_council stud_courses stud_parents student ta_phonenumber

1 SELECT * FROM university_database.ta_phonenumber;

Result Grid

phone	empro
1199448855	19100213
1199884455	19101910
1200998877	19101910
1088337755	19102722

Object Info Session

Output

Action Output

#	Time	Action	Message	Duration / Fech
12	02:33:13	SELECT * FROM university_database student LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
13	02:33:28	SELECT * FROM university_database ta_phonenumber LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

2:33 AM 1/10/2023

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

sys

university_database

course

department

department_mgr

prof_phonenumber

professor_explains

professor_teaches

professor

program

stud_council

stud_courses

stud_parents

student

ta_phonenumber

teaching_assistant

Views

Stored Procedures

Functions

Administration Schemas

Information

Schema: university_database

Query 1

department_mgr prof_phonenumber professor_explains professor_teaches professor program stud_council stud_courses stud_parents student ta_phonenumber teaching_assistant

1 SELECT * FROM university_database.teaching_assistant;

Result Grid

empro	Date_grad	Gpa_graduated_with	fname	mname	lname	address	Date_of_birth	Salary	room	ssn	deptnum
19100213	2020-06-19	3.99	Almed	husain	selim	alexandria	1995-05-02	10000	112	87649287	20
19101910	2020-06-18	3.00	Mahmoud	hasanen	shady	cairo	1994-06-03	5000	111	67859037	50
19102722	2022-05-16	3.96	Mohamed	Hassan	salem	giza	1999-05-14	11000	111	98987657	10

Object Info Session

Output

Action Output

#	Time	Action	Message	Duration / Fech
13	02:33:28	SELECT * FROM university_database ta_phonenumber LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
14	02:33:43	SELECT * FROM university_database teaching_assistant LIMIT 0, 1000	3 row(s) returned	0.016 sec / 0.000 sec

2:33 AM 1/10/2023

SQL code:-

```
#create database University_database;
```

```
#create table Department(dept_num int(2) not null ,deptname varchar(14) unique not null,  
constraint primary key (dept_num));
```

```
#create table professor (empnum int(8) not null,ranking varchar(20) check (ranking =  
"Instructor" or ranking ="Assistant Professor" or ranking = "Associate Professor" or ranking =  
"Professor"),research_speciality varchar(20) not null ,fname varchar(20) not null,mname  
varchar(20) default "",lname varchar(20)not null,address varchar(100) not null,Date_of_birth  
date not null,Salary int(10) check (salary between 20000 and 50000 ),room varchar(8) not null  
,ssn int(15) unique not null,deptnum int(2) not null,constraint primary key (empnum),constraint  
foreign key(deptnum) references department(dept_num));
```

```
#create table Department_mgr(dept_num int(2) not null,mgr int(8) not null,constraint primary  
key (dept_num),constraint foreign key (mgr) references professor(empnum));
```

```
#create table program(prog_id int(8) not null ,years_of_study int(2) not null ,prog_name  
varchar(20) not null,dept_num int (2) not null ,constraint primary key (prog_id),constraint foreign  
key (dept_num) references department(dept_num),constraint unique (prog_name));
```

```
#create table teaching_assistant(empnum int(8) not null ,Date_grad date not null  
,Gpa_graduated_with numeric(3,2) check (gpa_graduated_with between 0 and 4),fname  
varchar(20) not null ,mname varchar(20) default "",lname varchar(20) not null,address  
varchar(100) not null,Date_of_birth date not null,Salary int(10) check (salary between 5000 and  
11000),room varchar(8) not null ,ssn int(15) unique not null ,deptnum int(2) not null,constraint  
primary key (empnum),constraint foreign key(deptnum) references department(dept_num));
```

```
#create table stud_parents(parent_ssn int(15) not null ,job varchar (20),address varchar(30) not  
null ,constraint primary key (parent_ssn));
```

```
#create table student(regno int(8) not null ,GPA numeric(3,2) check (gpa between 0 and 4  
,phone_num int(12) not null ,ssn int(15),parent_ssn int(15),constraint primary key  
(regno),constraint foreign key(parent_ssn) references stud_parents(parent_ssn));
```

```
#create table stud_council(s_name varchar(30),regno int(8),president varchar(20),datestarted  
date,constraint primary key (s_name , regno),constraint foreign key (regno) references  
student(regno));
```

```
#create table course(course_code varchar(6) not null ,course_name varchar(20) not null unique  
,dept_num int(2) not null ,constraint primary key (course_code),constraint foreign key  
(dept_num) references department(dept_num));
```

```
#create table professor_explains(empnum int(8) not null ,course_code varchar(6) not null
,constraint primary key(empnum,course_code),constraint foreign key (empnum) references
professor(empnum),constraint foreign key (course_code) references course(course_code));
```

```
#create table prof_phonenumber(phone int(12) not null,empno int(8) not null ,constraint
primary key(empno,phone),constraint foreign key (empno) references professor(empnum));
```

```
#create table TA_phonenumber(phone int(12) not null ,empno int(8) not null ,constraint primary
key(empno,phone),constraint foreign key (empno) references teaching_assistant(empnum));
```

```
#create table professor_teaches(regno int(8) not null,empno int(8) not null ,constraint primary
key (regno,empno),constraint foreign key (regno) references student(regno),constraint foreign
key (empno) references professor(empnum));
```

```
#create table stud_courses(regno int(8) not null,course_code varchar(6) not null,constraint
primary key (regno,course_code),constraint foreign key (regno) references
student(regno),constraint foreign key (course_code) references course(course_code));
```

```
#INSERT INTO `university_database`.`department` (`dept_num`, `depname`) VALUES ('10',
'computer');
```

```
#INSERT INTO `university_database`.`department` (`dept_num`, `depname`) VALUES ('20',
'electronics');
```

```
#INSERT INTO `university_database`.`department` (`dept_num`, `depname`) VALUES ('30',
'industrial');
```

```
#INSERT INTO `university_database`.`department` (`dept_num`, `depname`) VALUES ('40',
'electrical');
```

```
#INSERT INTO `university_database`.`department` (`dept_num`, `depname`) VALUES ('50',
'mechanical');
```

```
#alter table professor change ranking ranking varchar(20) check (ranking = "Instructor" or
ranking = "Assistant Professor" or ranking = "Associate Professor" or ranking = "Professor");
```

```
#INSERT INTO professor (`empnum`, `ranking`, `research_speciality`, `fname`, `mname`,
`lname`, `address`, `Date_of_birth`, `Salary`, `room`, `ssn`, `deptnum`) VALUES ('1510012',
'Professor', 'Maths', 'Mohamed', 'Nasser', 'Elmaghraby', 'Alexandria', '2001-05-14', '50000',
'203g', '1221345678', '10');
```

```
#INSERT INTO professor (`empnum`, `ranking`, `research_speciality`, `fname`, `mname`,
`lname`, `address`, `Date_of_birth`, `Salary`, `room`, `ssn`, `deptnum`) VALUES ('1510013',
'associate Professor', 'data security', 'Mohannad', 'wael', 'taman', 'Alexandria', '2001-11-29',
'40000', '204g', '1221345878', '20');
```

```
#INSERT INTO professsor (`empnum`, `ranking`, `reasearch_speciality`, `fname`, `mname`,  
`lname`, `address`, `Date_of_birth`, `Salary`, `room`, `ssn`, `deptnum`) VALUES ('1510014',  
'assistant Professor', 'Electric circuits', 'abdelrahman', 'ahmed', 'mazhar', 'Cairo', '2001-06-13',  
'30000', '203g', '1221345679', '30');
```

```
#INSERT INTO professsor (`empnum`, `ranking`, `reasearch_speciality`, `fname`, `mname`,  
`lname`, `address`, `Date_of_birth`, `Salary`, `room`, `ssn`, `deptnum`) VALUES ('1510016',  
'instructor', 'Microprocsors', 'Mahmoud', 'ahmed', 'shosha', 'Giza', '1999-04-16', '20000', '205g',  
'1221345698', '40');
```

```
#INSERT INTO professsor (`empnum`, `ranking`, `reasearch_speciality`, `fname`, `mname`,  
`lname`, `address`, `Date_of_birth`, `Salary`, `room`, `ssn`, `deptnum`) VALUES ('1510017',  
'instructor', 'Transistors', 'youssef', 'Nasser', 'Elshiekh', 'dahab', '1999-05-19', '20000', '203',  
'1221345978', '50');
```

```
#INSERT INTO professsor (`empnum`, `ranking`, `reasearch_speciality`, `fname`, `mname`,  
`lname`, `address`, `Date_of_birth`, `Salary`, `room`, `ssn`, `deptnum`) VALUES ('1510019',  
'instructor', 'Database manegment', 'mahmoud', 'Nasser', 'Elsafy', 'Alexandria', '1999-07-14',  
'20000', '111', '1221395678', '10');
```

```
#INSERT INTO `university_database`.`course` (`course_code`, `course_name`, `dept_num`) VALUES ('cc305', 'Data security', '10');
```

```
#INSERT INTO `university_database`.`course` (`course_code`, `course_name`, `dept_num`) VALUES ('ec303', 'Electronics 2', '20');
```

```
#INSERT INTO `university_database`.`course` (`course_code`, `course_name`, `dept_num`) VALUES ('ee300', 'circuits 2', '40');
```

```
#INSERT INTO `university_database`.`course` (`course_code`, `course_name`, `dept_num`) VALUES ('im500', 'Industrial relations', '30');
```

```
#INSERT INTO `university_database`.`course` (`course_code`, `course_name`, `dept_num`) VALUES ('me333', 'Mechanics 2', '50');
```

```
#INSERT INTO `university_database`.`department_mgr` (`dept_num`, `mgr`) VALUES ('10', '1510012');
```

```
#INSERT INTO `university_database`.`department_mgr` (`dept_num`, `mgr`) VALUES ('50', '1510013');
```

```
#INSERT INTO `university_database`.`department_mgr` (`dept_num`, `mgr`) VALUES ('20', '1510016');
```

```
#INSERT INTO `university_database`.`department_mgr` (`dept_num`, `mgr`) VALUES ('30', '1510017');
```

```
#INSERT INTO `university_database`.`department_mgr` (`dept_num`, `mgr`) VALUES ('40', '1510019');
```

```
#INSERT INTO `university_database`.`prof_phonenumber` (`phone`, `empno`) VALUES ('01018189065', '1510013');
```

```
#INSERT INTO `university_database`.`prof_phonenumber` (`phone`, `empno`) VALUES ('0198374804', '1510012');
```

```
#INSERT INTO `university_database`.`prof_phonenumber` (`phone`, `empno`) VALUES ('011847486', '1510019');
```

```
#INSERT INTO `university_database`.`prof_phonenumber` (`phone`, `empno`) VALUES ('012848567', '1510019');
```

```
#INSERT INTO `university_database`.`professor_explains` (`empnum`, `course_code`) VALUES ('1510012', 'cc305');
```

```
#INSERT INTO `university_database`.`professor_explains` (`empnum`, `course_code`) VALUES ('1510013', 'cc305');
```

```
#INSERT INTO `university_database`.`professor_explains` (`empnum`, `course_code`) VALUES ('1510019', 'ec303');
```

```
#INSERT INTO `university_database`.`professor_explains` (`empnum`, `course_code`) VALUES ('1510019', 'ee300');
```

```
#INSERT INTO `university_database`.`professor_explains` (`empnum`, `course_code`) VALUES ('1510012', 'ec303');
```

```
#INSERT INTO program () VALUES (00502,2,'Engineering',10);
```

```
#INSERT INTO program () VALUES (11263,1,'cyber security',20);
```

```
#INSERT INTO program () VALUES (00244,3,'Data science',10);
```

```
#INSERT INTO program () VALUES (22103,1,'Enginnering economy',30);
```

```
#INSERT INTO program () VALUES (22366,1,'Physical_Education',30);
```

```
#INSERT INTO program () VALUES (11475,2,'Medicine',20);
```

```
#INSERT INTO stud_parents () VALUES (587492,'Engineer','Smouha'),(420885,'Doctor','Louran'),(741963,'Scientist','Asafra'),(267493,'Coach','Sporting');
```

```
#INSERT INTO student () VALUES (19100018,3.4,01236698746,815698,587492);
```

```
#INSERT INTO student () VALUES (19100111,3.9,01154986327,336520,420885);
```

```

#INSERT INTO student () VALUES (19100222,3.8,01556698523,563278,741963);

#INSERT INTO student () VALUES (19105876,3.6,01004933752,639874,267493);

#INSERT INTO `university_database`.`stud_council` (`s_name`, `regno`, `president`,
`datestarted`) VALUES ('alpha', '19100111', 'yehia Mohamed', '2020-06-17');

#INSERT INTO `university_database`.`stud_council` (`s_name`, `regno`, `president`,
`datestarted`) VALUES ('beta', '19100222', 'omar walid', '2020-5-18');

#INSERT INTO `university_database`.`stud_council` (`s_name`, `regno`, `president`,
`datestarted`) VALUES ('gamma', '19100018', 'abdallah walid', '2022-1-1');

#INSERT INTO `university_database`.`stud_council` (`s_name`, `regno`, `president`,
`datestarted`) VALUES ('uno', '19105876', 'youssef mohamed', '2023-1-1');

#INSERT INTO `university_database`.`professor_teaches` (`regno`, `empno`) VALUES
('19100111', '1510012');

#INSERT INTO `university_database`.`professor_teaches` (`regno`, `empno`) VALUES
('19100222', '1510013');

#INSERT INTO `university_database`.`professor_teaches` (`regno`, `empno`) VALUES
('19100018', '1510019');

#INSERT INTO `university_database`.`professor_teaches` (`regno`, `empno`) VALUES
('19100111', '1510019');

#INSERT INTO `university_database`.`stud_courses` (`regno`, `course_code`) VALUES
('19100018', 'cc305');

#INSERT INTO `university_database`.`stud_courses` (`regno`, `course_code`) VALUES
('19100018', 'ec303');

#INSERT INTO `university_database`.`stud_courses` (`regno`, `course_code`) VALUES
('19100111', 'cc305');

#INSERT INTO `university_database`.`stud_courses` (`regno`, `course_code`) VALUES
('19100111', 'ec303');

#INSERT INTO `university_database`.`stud_courses` (`regno`, `course_code`) VALUES
('19100222', 'ee300');

#INSERT INTO `university_database`.`stud_courses` (`regno`, `course_code`) VALUES
('19100222', 'im500');

#INSERT INTO `university_database`.`stud_courses` (`regno`, `course_code`) VALUES
('19105876', 'ee300');

```

```
#INSERT INTO `university_database`.`stud_courses` (`regno`, `course_code`) VALUES ('19105876', 'im500');
```

```
#INSERT INTO `university_database`.`teaching_assistant` (`empnum`, `Date_grad`, `Gpa_graduated_with`, `fname`, `mname`, `lname`, `address`, `Date_of_birth`, `Salary`, `room`, `ssn`, `deptnum`) VALUES ('19102722', '2022-05-16', '3.96', 'Mohamed', 'Hassan', 'salem', 'giza', '1999-5-14', '11000', '111', '98987657', '10');
```

```
#INSERT INTO `university_database`.`teaching_assistant` (`empnum`, `Date_grad`, `Gpa_graduated_with`, `fname`, `mname`, `lname`, `address`, `Date_of_birth`, `Salary`, `room`, `ssn`, `deptnum`) VALUES ('19100213', '2020-06-19', '3.99', 'Ahmed', 'husaain', 'selim', 'alexandria', '1995-5-2', '10000', '112', '87649287', '20');
```

```
#INSERT INTO `university_database`.`teaching_assistant` (`empnum`, `Date_grad`, `Gpa_graduated_with`, `fname`, `mname`, `lname`, `address`, `Date_of_birth`, `Salary`, `room`, `ssn`, `deptnum`) VALUES ('19101910', '2000-06-18', '3', 'Mahmoud', 'hasanen', 'shady', 'cairo', '1994-6-3', '5000', '113', '67859037', '50');
```

```
#INSERT INTO `university_database`.`ta_phonenumber` (`phone`, `empno`) VALUES ('01200998877', '19101910');
```

```
#INSERT INTO `university_database`.`ta_phonenumber` (`phone`, `empno`) VALUES ('01199884455', '19101910');
```

```
#INSERT INTO `university_database`.`ta_phonenumber` (`phone`, `empno`) VALUES ('01088337755', '19102722');
```

```
#INSERT INTO `university_database`.`ta_phonenumber` (`phone`, `empno`) VALUES ('01199448855', '19100213');
```