

Current Scenario | Case Study. "ERD & DBMS"

Steps

- ① Identify Entity and members
- ② Decide relationships and cardinality and modality
- ③ Draw Entities separately with attributes
- ④ Connect relationship and entities.

In a IIPS College, there are several programs and each program has a program incharge who belongs to faculty. Programs ~~instructor~~ include Post graduation and Integrated which has courses like MBA (2 yr), BCom (3 yr) and M.Tech (5 yr).

Students can belong to only one Department course at a time and courses can have more than one or no of students.

Students and faculty have name and unique identification number (Roll No.), employee id with Email Address, gender and age. Student studies different courses offered by IIPS College, and faculty teaches these courses.

Faculty member can teach in multiple programs at a time. Each course can be taught by many faculty member or no one.

Faculty members are also working on multiple research projects. One project can have more than one faculty members and faculty members can work on more than one project.

Students studies in classrooms, perform practicals in lab and self study ~~can~~ in library. Each batch ~~can~~ can have different different section and each batch have three batch mentor who belongs to faculty.

~~Faculty~~ All ~~the~~ students have to give exams conducted by IIPS and faculties are setting question paper for students. IIPS declared results prepared by faculties.

IIPS has a Director who leads the management, management is done by different department and each department is lead by different faculties.

Departments like fees department, placement cell, Account section, Scholarship section.

Student pay fees at fees department. Accounts department manages the finance of IIPS. Placement Cell organises placement drives and student ~~participated~~ appears in the placement drives and placement Cell have a student Coordinator team who coordinate with students ~~and~~. Many Company visits IIPS and ~~offer~~ Every Companies offer different role. Each student can ~~get~~ ~~not~~ have at max two ^{job} offers. Each Company can offer job to many students.

Students can apply for Scholar at Scholarship department ~~according~~. There categories ~~are~~ ~~are~~. A student ~~can be~~ ~~not~~ can be eligible for than one scholarship but one student can get one scholarship only one at a time. According to there Category ~~according~~ ~~to~~ ~~categories~~ ~~are~~ there are many category for scholarship but one student belong to one Category only and one Category can have many students.

#

Identify Entity and members Identification & justification

from the study of ~~IIPS College~~ business processes, carried out at ~~School of~~ International Institute of professional studies (D.A.V.V), we have identified following high level entity types.

1. USER:

The user is a person who uses the system. He may be faculty or a student. Its attribute are name & password, ~~and~~ type of user.

2. IIPS:

IIPS is a institute. Which contains everything like students, faculty, departments, programs, courses. Etc.

3. Director:

Director manages the IIPS.

4. Programs:

This entity lists several courses and courses have attributes like MBA, BCOM and M.Tech.

5. faculty :-

faculty is a sub type of USER. Its attributes are ~~one~~ faculty member like program Incharge, batch mentor and teaching faculty. faculty members has attributes name, emp ID, gender, age, email, ~~password~~.

6. Courses :-

Courses ~~one~~ has attributes MBA (2yr), BCom (3yr), M.Tech (5yr). and Each course have batches ~~and~~ ~~according~~ yearly.

7. Students :-

Student is entity which contains information about students appears in exams. Student is a sub type of USER. Its attributes are name, rollno., gender, age, email, Course and Batch.

8. Research project :-

Research project is an entity. faculty works on ~~one~~ projects.

9. Class Rooms :-

~~student~~ classroom is a entity. Students study in class room.

10) labs :-

labs are entity . Student perform practicals in labs.

11) library :- library it is an entity students self study in library .

12) Batch :- It is an entity students are in batches . batches has a batch mentors from faculty.

13) section :- section is an entity and students are in sections.

14) exam :- exam is an entity . Students gives exams and faculty takes exams.

15) Result :- Result is an entity ~~student~~ faculty gives results.

16) Department :- It is an entity . Its attributes are account dept , fees dept , scholarship Dept , placement cell .

17) fees :- It is an entity . Student pay fees to IIPS / dept .

⑧ finance : finance is entity accounts department manages finance of IIIPS.

⑨ placement Drive :
placement is an entity. student appears in drives ~~and~~ - ~~from~~ ^{by company}. place drives organise by placement Cell.

⑩ Student Coordinator team :
It is an entity. team coordinates with students for drive.

⑪ Companies :
Company is an entity. It ~~offers~~ job to students.

⑫ Job offers :
Job offer is an entity. ~~a company~~ Students get job offers.

⑬ Scholarship :
Scholarship is an entity. Students can apply for scholarship at scholarship department.

⑭ Category :
Category it is an entity. Students belongs to a category ~~and~~ in its attributes are SC, ST, OBC, gen EWS.

Relationship types Identification.

①

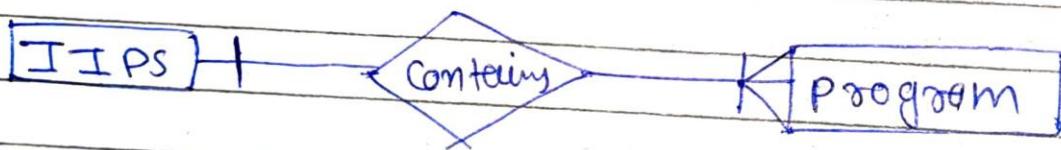
Director manages IIIPS



- A Director manages IIIPS.
- IIIPS managed by director.

②

IIIPS Contains program



- IIIPS Contains a one or many programs.
- One or many programs^{may be} contained in IIIPS.

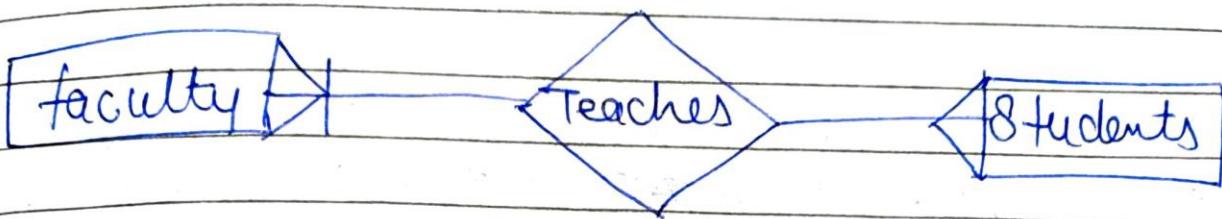
③

program Contains courses.



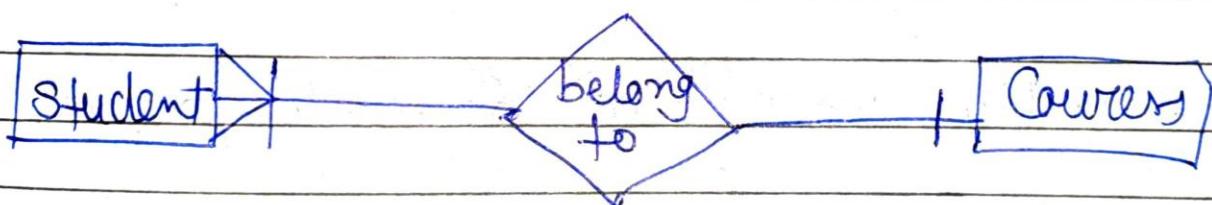
- ① many program Containing many courses.
② many courses contained by many programs.

④ faculty teaches Students



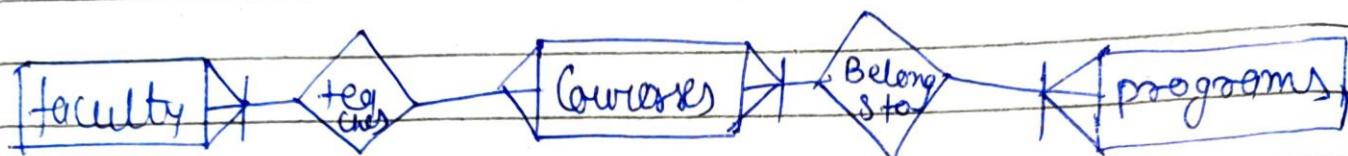
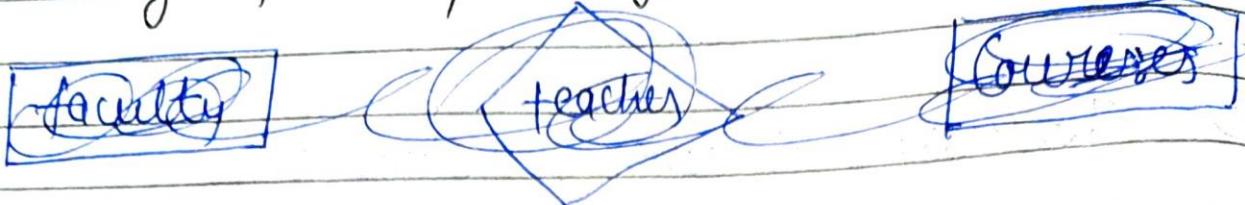
- one or many faculty teaches many students.
- many students taught by one or more faculties.

⑤ Student belongs to Courses.



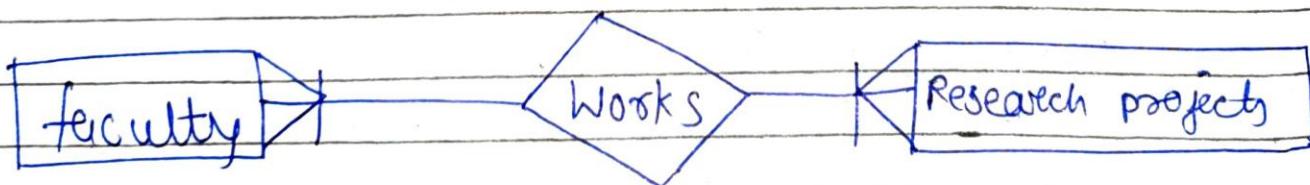
- Many students belongs to one course.
- A course belongs by one or many students.

(many to many)
 ⑥ faculty teaches Courses, and Courses
 belongs to many programs.



- ① one or many faculty teaches many Courses
- ② many Courses belongs one or many programs
- ③ many Courses taught by one or many faculty
- ④ one or many program belongs by many Courses.

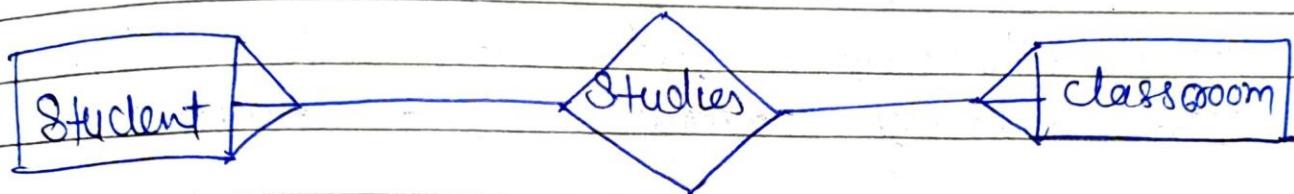
⑦ faculty works on Research projects



- ① faculty works on one or many Research project.

② One or many research project worked by one or many faculties.

③ Student studies in classroom



① Many students studies in one or many classrooms.

② One or many classroom studies in by many students.

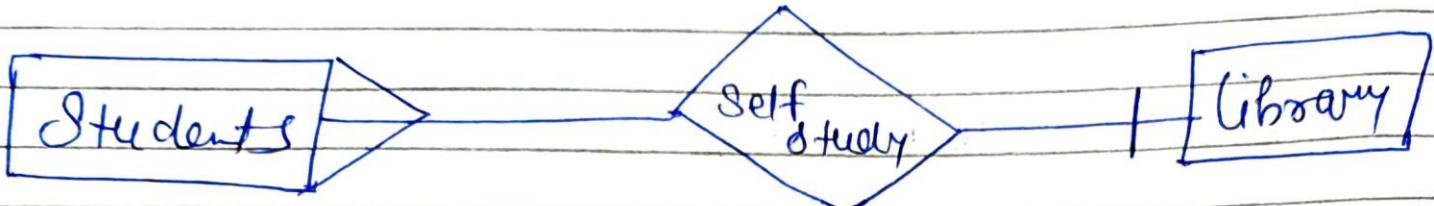
④ Student perform practicals in lab.



① Many students perform practicals in one lab.

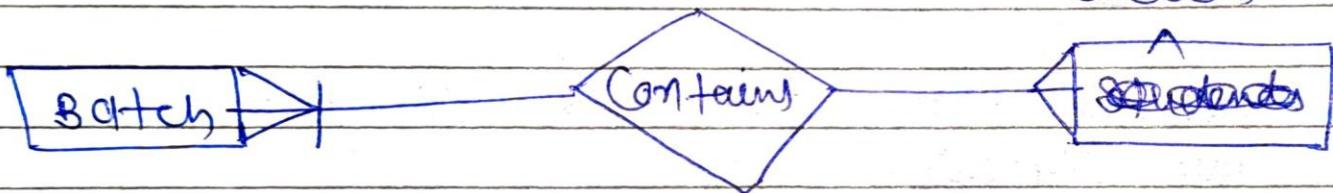
② One lab practicals performed by many students.

⑩ Student selfstudy in library.



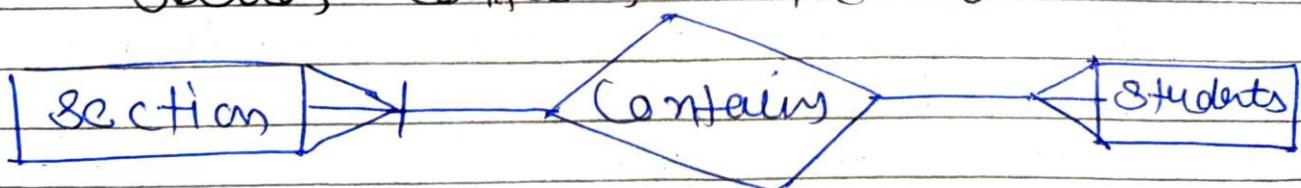
- ① many Students study in one library.
- ② In library many student studies.

⑪ Batch Contains by ~~student~~ Section.



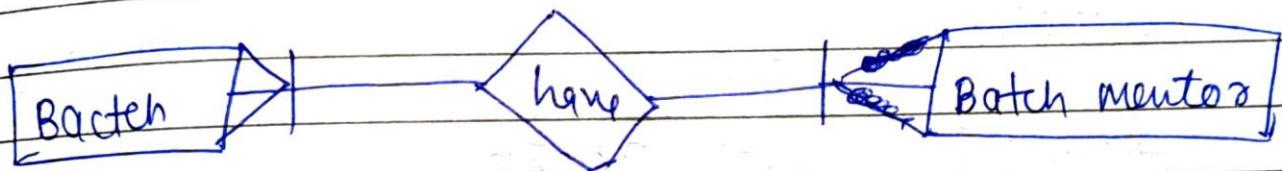
- ① one or many Batches Contains many ~~student~~ Section.
- ② many ~~student~~ Contained in one or many Batches Section

⑫ ~~Batch~~ Contains Section
Section Contains Students.



1. one or many section Contains many students.
2. many student Contained in one or many section.

(13) Batch have batch mentor



- ① one or many Batches have one BM.
- ② one batch mentor have by many Batches.

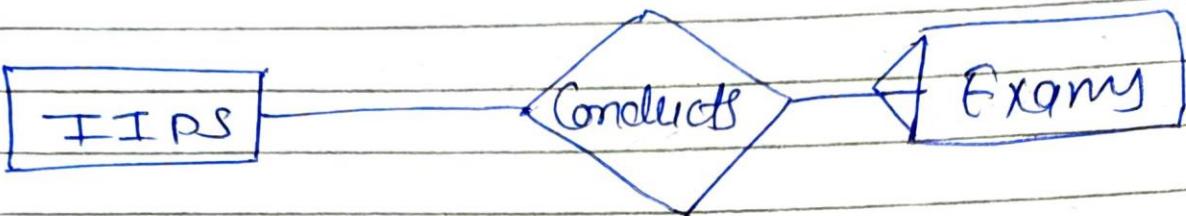
(14) Batch mentor belongs to faculty



- ① BM belong to faculty.
- ② faculty belongs by BM.

(15)

IIPS Conducts Exams

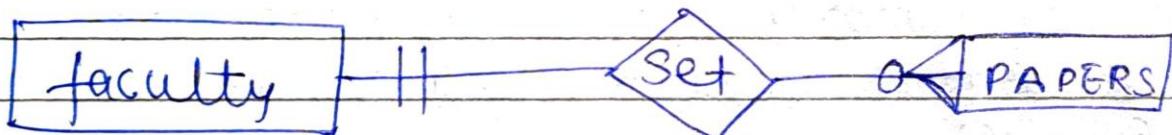


- ①
- ②

IIPS Conducts one or many Exams.
one or many Exams conducted by
IIPS.

(16)

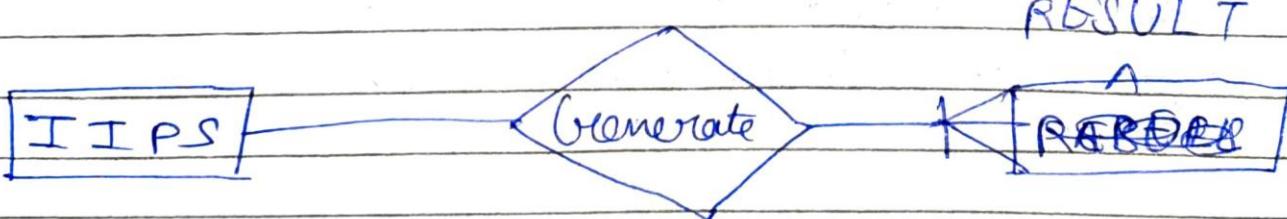
faculty Sets PAPER



- ① A faculty may set zero or many papers.
- ② A paper is set by exactly one faculty

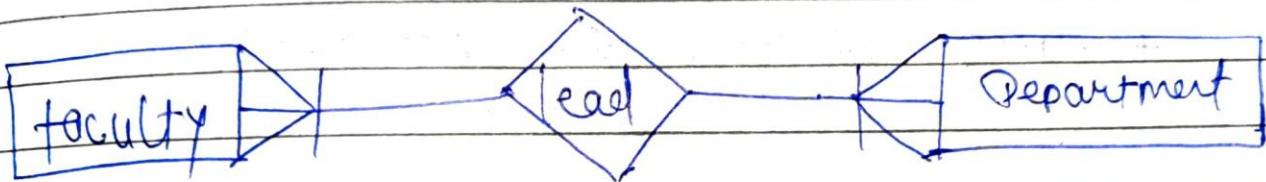
(17)

IIPS Generate ~~PAPER~~ RESULT
~~RESULT~~



- ① A TIPS many generate one or many RESULT.
- ② A result is generated by TIPS.

18 ~~repeat~~ faculty lead Departments



- ① one or many faculty lead one or many Department.
- ② one or many Dept. lead one or many faculty.

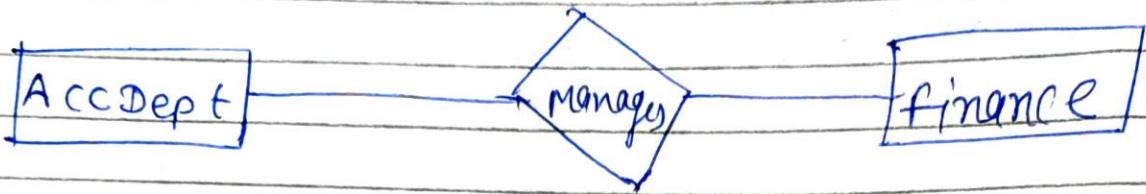
19 Student pay fees.



- ① Many students pay fees.
- ② fees pay by many students.

Q0

Account department manages finance.



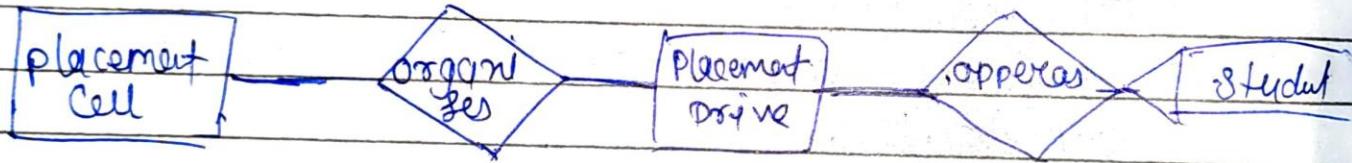
①

Acc Dept manages finance.

② finance managed by ACC DEPT;

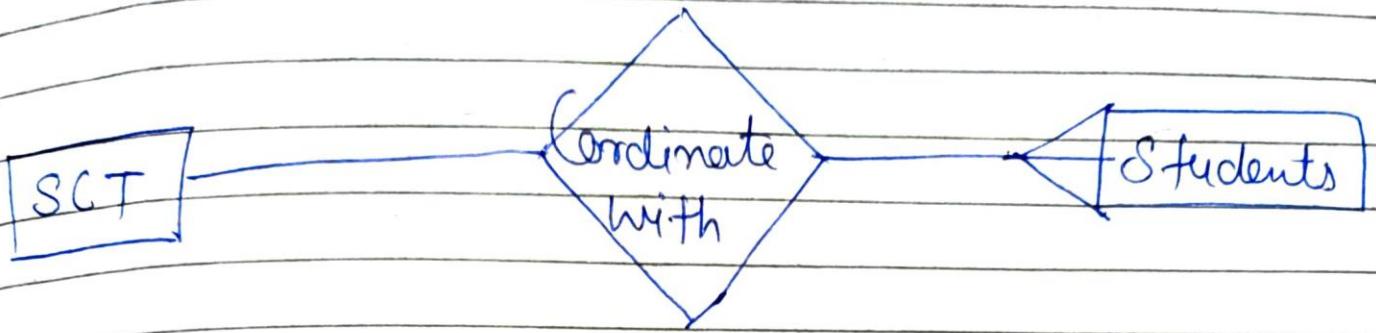
Q1

many to many



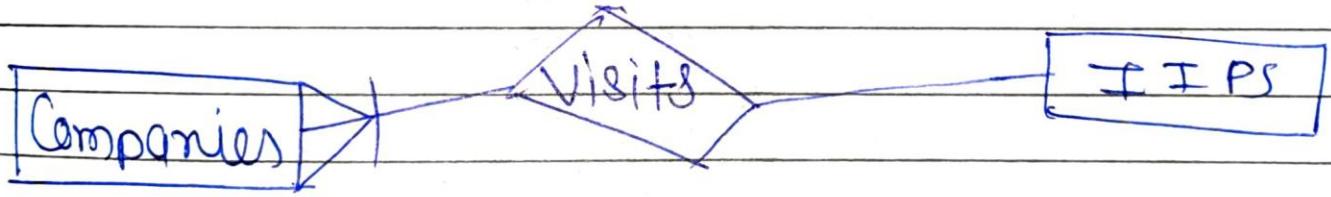
- ① A Placement Cell organises placement Drive.
- ② Placement Drive organised by placement Cell.
- ③ placement Drive appreciated by students
- ④ many students appreciated ^{many} in placement Drive.

(2) Student Coordinator team Coordinate with Students



- ① SCT coordinates with many Students.
- ② many Student coordinate by Student Coordinator team.

(3) many ~~to~~ Companies visits TIPS



- ① One or many Companies visit TIPS.
- ② TIPS visited by many Companies.

Entity and its Attributes

1. User
 1. User id
 2. User type
 3. User name
 4. User age
 5. User phone no.
2. College
 1. College name
 2. College id
 3. College details
 4. College phone no.
3. Dean
 1. Dean name
 2. Dean id
 3. Dean age
 4. Dean phone no.
4. Department
 1. Department name
 2. Department id
 3. no. of students
 4. no. of faculties
 5. seats allocated
5. Student table
 1. Student id
 2. Student name
 3. Age
 4. Phone no.
 5. gender
6. Faculty
 1. Faculty id
 2. Name
 3. Age
 4. Blood group
5. Total no. of Subject
7. Batch
 1. Batch id
 2. Batch name
 3. Batch year
 4. No. of Students
 5. Section
 6. Mentor

8. Course

- 1. Course id
- 2. Course Name
- 3. Course Fees
- 4. Duration
- 5. Incharge
- 6. Type

9. Section

- 1. Section Id
- 2. Section name
- 3. No. of Students
- 4. No. of Classes

10. Exams

- 1. Exam id
- 2. Exam name
- 3. Exam Date
- 4. Exam duration

11. Classrooms

- 1. id
- 2. Room no.
- 3. No. of Student
- 4. Duration

12. Fees

- 1. Fees id
- 2. Fees Structure
- 3. Fees Notice
- 4. Fees Detail

13. Placement

- 1. Placement id
- 2. placement Coordinator
- 3. Placement duration
- 4. No. of companies visited

14. Events

- 1. Event Name
- 2. Event Type
- 3. Event Incharge
- 4. Event Detail
- 5. Event id

16. Result

1. Result id
2. Result Batch
3. Pass/Fail
4. semester

17. Library

1. Id
2. Student info
3. Library Name
4. Contact no.

18. Lab

1. Lab id
2. Lab subject
3. lab incharge
4. Batch
5. Lab Incharge
6. Duration
7. Course

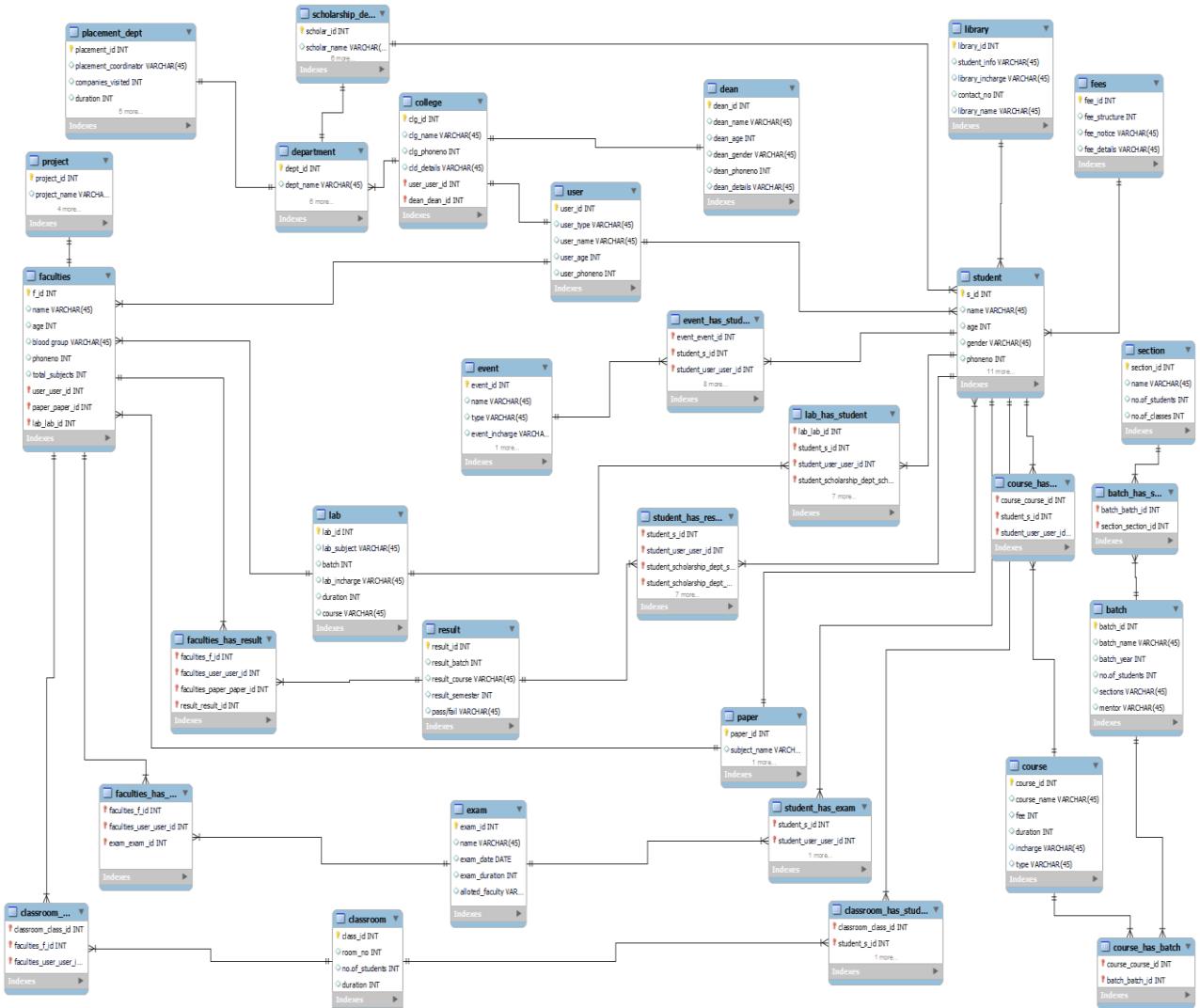
19. Project

1. Project id
2. Project Name
3. Project Incharge
4. Project details

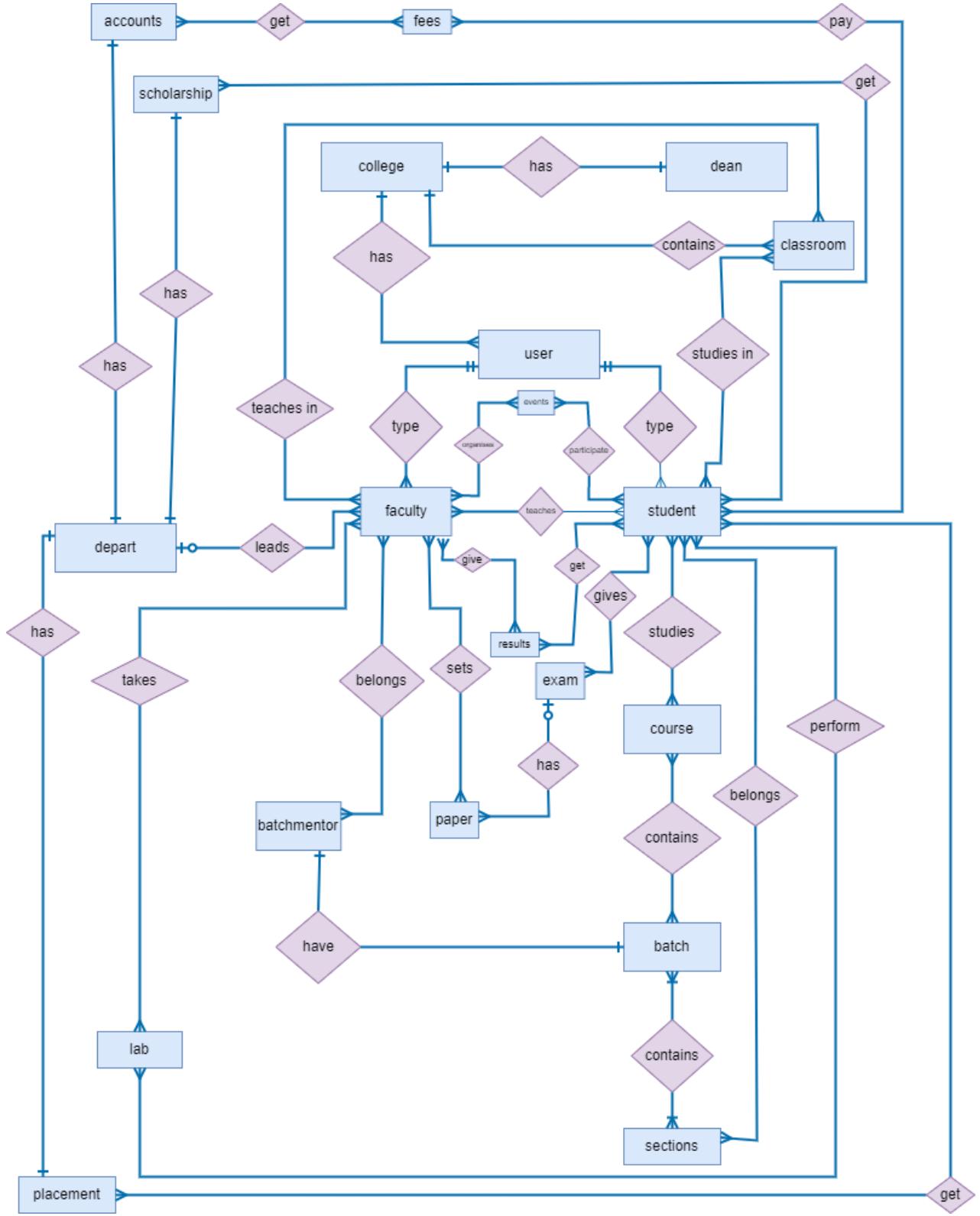
20. Schlorship

1. Schlorship id
2. Schlorship Name
3. Schlorship Incharge
4. Category

Relational Diagram



E-R Diagram



```
CREATE TABLE `scenario`.`user` (
  `user_id` INT NOT NULL,
  `user_type` VARCHAR(45) NULL,
  `user_name` VARCHAR(45) NULL,
  `user_age` INT NULL,
  `user_phoneno` INT NULL,
  PRIMARY KEY (`user_id`));
```

```
CREATE TABLE `scenario`.`college` (
  `clg_id` INT NOT NULL,
  `clg_name` VARCHAR(45) NULL,
  `clg_phoneno` INT NULL,
  `cld_details` VARCHAR(45) NULL,
  PRIMARY KEY (`clg_id`));
```

```
CREATE TABLE `scenario`.`dean` (
  `dean_id` INT NOT NULL,
  `dean_name` VARCHAR(45) NULL,
  `dean_age` INT NULL,
  `dean_gender` VARCHAR(45) NULL,
  `dean_phoneno` INT NULL,
  `dean_details` VARCHAR(45) NULL,
  PRIMARY KEY (`dean_id`));
```

```
CREATE TABLE `scenario`.`department` (
  `dept_id` INT NOT NULL,
  `dept_name` VARCHAR(45) NULL,
  `no.of_faculties` INT NULL,
  `no.of_sections` INT NULL,
  `total_seats` INT NULL,
  PRIMARY KEY (`dept_id`));
```

```
CREATE TABLE `scenario`.`faculties` (
  `f_id` INT NOT NULL,
  `name` VARCHAR(45) NULL,
  `age` INT NULL,
  `blood group` VARCHAR(45) NULL,
  `phoneno` INT NULL,
  `total_subjects` INT NULL,
  PRIMARY KEY (`f_id`));
```

```
CREATE TABLE `scenario`.`student` (
  `s_id` INT NOT NULL,
  `name` VARCHAR(45) NULL,
  `age` INT NULL,
  `gender` VARCHAR(45) NULL,
  `phoneno` INT NULL,
  `dob` DATE NULL,
  `rollno` INT NULL,
  PRIMARY KEY (`s_id`));
```

```
CREATE TABLE `scenario`.`batch` (
  `batch_id` INT NOT NULL,
  `batch_name` VARCHAR(45) NULL,
  `batch_year` INT NULL,
  `no.of_students` INT NULL,
  `sections` VARCHAR(45) NULL,
  `mentor` VARCHAR(45) NULL,
  PRIMARY KEY (`batch_id`));
```

```
CREATE TABLE `scenario`.`course` (
  `course_id` INT NOT NULL,
  `course_name` VARCHAR(45) NULL,
  `fee` INT NULL,
  `duration` INT NULL,
  `incharge` VARCHAR(45) NULL,
  `type` VARCHAR(45) NULL,
  PRIMARY KEY (`course_id`));
```

```
CREATE TABLE `scenario`.`section` (
  `section_id` INT NOT NULL,
  `name` VARCHAR(45) NULL,
  `no.of_students` INT NULL,
  `no.of_classes` INT NULL,
  PRIMARY KEY (`section_id`));
```

```
CREATE TABLE `scenario`.`exam` (
  `exam_id` INT NOT NULL,
  `name` VARCHAR(45) NULL,
  `exam_date` DATE NULL,
  `exam_duration` INT NULL,
  `allotted_faculty` VARCHAR(45) NULL,
  PRIMARY KEY (`exam_id`));
```

```
CREATE TABLE `scenario`.`classroom` (
  `class_id` INT NOT NULL,
  `room_no` INT NULL,
  `no.of_students` INT NULL,
  `duration` INT NULL,
  PRIMARY KEY (`class_id`));
```

```
CREATE TABLE `scenario`.`fees` (
  `fee_id` INT NOT NULL,
  `fee_structure` INT NULL,
  `fee_notice` VARCHAR(45) NULL,
  `fee_details` VARCHAR(45) NULL,
  PRIMARY KEY (`fee_id`));
```

```
CREATE TABLE `scenario`.`placement_dept` (
  `placement_id` INT NOT NULL,
  `placement_coordinator` VARCHAR(45) NULL,
  `companies_visited` INT NULL,
  `duration` INT NULL,
  `job_offers` INT NULL,
```

```
PRIMARY KEY (`placement_id`));
```

```
CREATE TABLE `scenario`.`event` (
`event_id` INT NOT NULL,
`name` VARCHAR(45) NULL,
`type` VARCHAR(45) NULL,
`event_incharge` VARCHAR(45) NULL,
`details` VARCHAR(45) NULL,
PRIMARY KEY (`event_id`));
```

```
CREATE TABLE `scenario`.`library` (
`library_id` INT NOT NULL,
`student_info` VARCHAR(45) NULL,
`library_incharge` VARCHAR(45) NULL,
`contact_no` INT NULL,
`library_name` VARCHAR(45) NULL,
PRIMARY KEY (`library_id`));
```

```
CREATE TABLE `scenario`.`lab` (
`lab_id` INT NOT NULL,
`lab_subject` VARCHAR(45) NULL,
`batch` INT NULL,
`lab_incharge` VARCHAR(45) NULL,
`duration` INT NULL,
`course` VARCHAR(45) NULL,
PRIMARY KEY (`lab_id`));
```

```
CREATE TABLE `scenario`.`scholarship_dept` (
`scholar_id` INT NOT NULL,
`scholar_name` VARCHAR(45) NULL,
`scholar_incharge` VARCHAR(45) NULL,
`category` VARCHAR(45) NULL,
PRIMARY KEY (`scholar_id`));
```

```
CREATE TABLE `scenario`.`project` (
`project_id` INT NOT NULL,
```

```
`project_name` VARCHAR(45) NULL,  
`project_incharge` VARCHAR(45) NULL,  
`project_details` VARCHAR(45) NULL,  
PRIMARY KEY (`project_id`);
```

```
CREATE TABLE `scenario`.`result` (  
`result_id` INT NOT NULL,  
`result_batch` INT NULL,  
`result_course` VARCHAR(45) NULL,  
`result_semester` INT NULL,  
`pass/fail` VARCHAR(45) NULL,  
PRIMARY KEY (`result_id`));
```

```
CREATE TABLE `scenario`.`paper` (  
`paper_id` INT NOT NULL,  
`subject_name` VARCHAR(45) NULL,  
`no.of_pages` VARCHAR(45) NULL,  
PRIMARY KEY (`paper_id`));
```

```
INSERT INTO `scenario`.`batch` (`batch_id`, `batch_name`, `batch_year`,  
`no.of_students`, `sections`, `mentor`) VALUES ('123', 'tulh', '2019', '68', 'A',  
'poonam mam');  
INSERT INTO `scenario`.`batch` (`batch_id`, `batch_name`, `batch_year`,  
`no.of_students`, `sections`, `mentor`) VALUES ('124', 'mcba', '2020', '78', 'C',  
'raghav sir');
```

```
INSERT INTO `scenario`.`classroom` (`class_id`, `room_no`, `no.of_students`,  
`duration`) VALUES ('1132', '209', '68', '1');  
INSERT INTO `scenario`.`classroom` (`class_id`, `room_no`, `no.of_students`,  
`duration`) VALUES ('3251', '208', '78', '2');
```

```
INSERT INTO `scenario`.`college` (`clg_id`, `clg_name`, `clg_phoneno`,  
`cld_details`) VALUES ('321', 'iips', '98765', 'engg');  
INSERT INTO `scenario`.`college` (`clg_id`, `clg_name`, `clg_phoneno`,  
`cld_details`) VALUES ('456', 'iips', '9876543', 'engg');
```

```
INSERT INTO `scenario`.`course` (`course_id`, `course_name`, `fee`, `duration`, `incharge`, `type`) VALUES ('5421', 'mtech', '46500', '5', 'manju mam', 'pg');
INSERT INTO `scenario`.`course` (`course_id`, `course_name`, `fee`, `duration`, `incharge`, `type`) VALUES ('6842', 'mca', '44050', '6', 'kirti mam', 'pg');
```

```
INSERT INTO `scenario`.`dean` (`dean_id`, `dean_name`, `dean_age`, `dean_gender`, `dean_phoneno`, `dean_details`) VALUES ('123', 'Bk tripathi', '46', 'male', '85632479', 'manages clg');
INSERT INTO `scenario`.`dean` (`dean_id`, `dean_name`, `dean_age`, `dean_gender`, `dean_phoneno`, `dean_details`) VALUES ('456', 'ak sapre', '86', 'male', '8529637', 'same');
```

```
INSERT INTO `scenario`.`department` (`dept_id`, `dept_name`, `no.of_faculties`, `no.of_sections`, `total_seats`) VALUES ('123', 'placement', '5', '62', '75');
INSERT INTO `scenario`.`department` (`dept_id`, `dept_name`, `no.of_faculties`, `no.of_sections`, `total_seats`) VALUES ('321', 'account', '15', '45', '60');
INSERT INTO `scenario`.`department` (`dept_id`, `dept_name`, `no.of_faculties`, `no.of_sections`, `total_seats`) VALUES ('639', 'scholarship', '13', '39', '78');
```

```
INSERT INTO `scenario`.`event` (`event_id`, `name`, `type`, `event_incharge`, `details`) VALUES ('54', 'tourista', 'fun', 'rahul', 'dance ');
INSERT INTO `scenario`.`event` (`event_id`, `name`, `type`, `event_incharge`, `details`) VALUES ('65', 'synergy', 'sports', 'kamlesh', 'play play');
```

```
INSERT INTO `scenario`.`exam` (`exam_id`, `name`, `exam_date`, `exam_duration`, `alloted_faculty`) VALUES ('156', 'internal', "", '3', 'rahul');
INSERT INTO `scenario`.`exam` (`exam_id`, `name`, `exam_date`, `exam_duration`, `alloted_faculty`) VALUES ('69', 'endsem', "", '2', 'kamlesh');
```

```
INSERT INTO `scenario`.`faculties` (`f_id`, `name`, `age`, `blood group`,  
`phoneno`, `total_subjects`) VALUES ('12', 'rahul', '36', 'b', '9856325', '3');  
INSERT INTO `scenario`.`faculties` (`f_id`, `name`, `age`, `blood group`,  
`phoneno`, `total_subjects`) VALUES ('32', 'kamlesh', '40', 'a', '4512369', '4');
```

```
INSERT INTO `scenario`.`fees` (`fee_id`, `fee_structure`, `fee_notice`,  
`fee_details`) VALUES ('52', '45620', 'given', 'pay it asap');  
INSERT INTO `scenario`.`fees` (`fee_id`, `fee_structure`, `fee_notice`,  
`fee_details`) VALUES ('65', '45870', 'done', 'done');
```

```
INSERT INTO `scenario`.`lab` (`lab_id`, `lab_subject`, `batch`, `lab_incharge`,  
`duration`, `course`) VALUES ('02', 'ds', '2019', 'rahul', '2', 'mtech');  
INSERT INTO `scenario`.`lab` (`lab_id`, `lab_subject`, `batch`, `lab_incharge`,  
`duration`, `course`) VALUES ('03', 'java', '2020', 'akshay', '3', 'mca');
```

```
INSERT INTO `scenario`.`library` (`library_id`, `student_info`, `library_incharge`,  
`contact_no`, `library_name`) VALUES ('123', 'no', 'dinesh', '123654', 'iips');  
INSERT INTO `scenario`.`library` (`library_id`, `student_info`, `library_incharge`,  
`contact_no`, `library_name`) VALUES ('31', 'yes', 'dinesh', '456321', 'iips');
```

```
INSERT INTO `scenario`.`paper` (`paper_id`, `subject_name`, `no.of_pages`)  
VALUES ('0022', 'dsa', '8');  
INSERT INTO `scenario`.`paper` (`paper_id`, `subject_name`, `no.of_pages`)  
VALUES ('0033', 'de', '6');
```

```
INSERT INTO `scenario`.`placement_dept` (`placement_id`,  
`placement_coordinator`, `companies_visited`, `duration`, `job_offers`) VALUES  
('456', 'nitin sir', '198', '5', '200');  
INSERT INTO `scenario`.`placement_dept` (`placement_id`,  
`placement_coordinator`, `companies_visited`, `duration`, `job_offers`) VALUES  
('032', 'nitin sir', '165', '8', '166');
```

```
INSERT INTO `scenario`.`project` (`project_id`, `project_name`,  
`project_incharge`, `project_details`) VALUES ('789', 'algo', 'dinesh', 'pending');  
INSERT INTO `scenario`.`project` (`project_id`, `project_name`,  
`project_incharge`, `project_details`) VALUES ('202', 'ml', 'kohli', 'pending');
```

```
INSERT INTO `scenario`.`result` (`result_id`, `result_batch`, `result_course`,  
`result_semester`, `pass/fail`) VALUES ('603', '2019', 'mtech', '6', 'pass');  
INSERT INTO `scenario`.`result` (`result_id`, `result_batch`, `result_course`,  
`result_semester`, `pass/fail`) VALUES ('102', '2020', 'mca', '4', 'pass');
```

```
INSERT INTO `scenario`.`scholarship_dept` (`scholar_id`, `scholar_name`,  
`scholar_incharge`, `category`) VALUES ('132', 'pms', 'gajendra', 'sc');  
INSERT INTO `scenario`.`scholarship_dept` (`scholar_id`, `scholar_name`,  
`scholar_incharge`, `category`) VALUES ('1001', 'medhavi', 'gajendra', 'gen');
```

```
INSERT INTO `scenario`.`section` (`section_id`, `name`, `no.of_students`,  
`no.of_classes`) VALUES ('001', 'section a', '40', '4');  
INSERT INTO `scenario`.`section` (`section_id`, `name`, `no.of_students`,  
`no.of_classes`) VALUES ('002', 'section b', '35', '4');
```

```
INSERT INTO `scenario`.`student` (`s_id`, `name`, `age`, `gender`, `phoneno`,  
`dob`, `rollno`) VALUES ('001', 'ankit', '22', 'male', '9131582', 'as', '04');  
INSERT INTO `scenario`.`student` (`s_id`, `name`, `age`, `gender`, `phoneno`,  
`dob`, `rollno`) VALUES ('002', 'mahak', '21', 'female', '6268532', 'as', '32');
```

```
INSERT INTO `scenario`.`user` (`user_id`, `user_type`, `user_name`, `user_age`,  
`user_phoneno`) VALUES ('002', 'stuuent', 'ankit', '22', '7354193');  
INSERT INTO `scenario`.`user` (`user_id`, `user_type`, `user_name`, `user_age`,  
`user_phoneno`) VALUES ('003', 'faculty', 'ankit', '22', '9131585');
```

Data Entry.....

The screenshot displays a database application interface with a sidebar containing a tree view of table names and a main area showing ten separate Result Grid windows, each representing a different table for data entry.

- Result Grid 1:** batch_id, batch_name, batch_year, no_of_students, sections, mentor
- Result Grid 2:** class_id, room_no, no_of_students, duration
- Result Grid 3:** dg_id, dg_name, dg_phoneno, dg_details
- Result Grid 4:** course_id, course_name, fee, duration, incharge, type
- Result Grid 5:** dean_id, dean_name, dean_age, dean_gender, dean_phoneno, dean_details
- Result Grid 6:** dept_id, dept_name, no_of_faculties, no_of_sections, total_seats
- Result Grid 7:** event_id, name, type, event_incharge, details
- Result Grid 8:** exam_id, name, exam_date, exam_duration, allotted_faculty
- Result Grid 9:** f_id, name, age, blood_group, phoneno, total_subjects
- Result Grid 10:** fee_id, fee_structure, fee_notice, fee_details
- Result Grid 11:** lab_id, lab_subject, batch, lab_incharge, duration, course
- Result Grid 12:** library_id, student_info, library_incharge, contact_no, library_name
- Result Grid 13:** paper_id, subject_name, no_of_pages
- Result Grid 14:** placement_id, placement_coordinator, companies_visited, duration, job_offers

Diagram illustrating a database schema with multiple tables and their relationships:

- fees**: Contains columns like fee_type, amount, and student_id.
- lab**: Contains columns like lab_type, capacity, and room_number.
- library**: Contains columns like book_id, title, author, and category.
- paper**: Contains columns like paper_id, title, abstract, and publication_date.
- placement_dept**: Contains columns like dept_id, name, and location.
- project**: Contains columns like project_id, name, and supervisor_id.
- result**: Contains columns like result_id, student_id, subject_id, and grade.
- scholarship_dept**: Contains columns like dept_id, name, and scholarship_type.
- student**: Contains columns like student_id, name, age, gender, and contact_info.
- teacher**: Contains columns like teacher_id, name, age, gender, and contact_info.
- user**: Contains columns like user_id, user_type, user_name, user_age, and user_phoneno.

The interface shows several Result Grids displaying data from these tables:

- Result Grid 1 (Placement Dept)**: Shows rows for project_id 202 and 789. Columns include project_name (ml, algo), project_incharge (kohli, dinesh), and project_details (pending, pending).
- Result Grid 2 (Result)**: Shows rows for result_id 102 and 603. Columns include result_batch (2019), result_course (mca, mtech), result_semester (4, 6), and pass/fail (pass, pass).
- Result Grid 3 (Scholarship Dept)**: Shows rows for scholar_id 132 and 1001. Columns include scholar_name (pms, medhavi), scholar_incharge (gajendra, gen), and category.
- Result Grid 4 (Student)**: Shows rows for section_id 1 and 2. Columns include name (section a, section b), no_of_students (40, 35), and no.of_classes (4, 4).
- Result Grid 5 (Student)**: Shows rows for s_id 1 and 2. Columns include name (ankit, mahak), age (22, 21), gender (male, female), phoneno (9131582, 6268532), dob (as, as), and rollo (4, 32).
- Result Grid 6 (User)**: Shows rows for user_id 1, 2, and 3. Columns include user_type (student, student, faculty), user_name (ankit, arunit, arunit), user_age (22, 22, 22), and user_phoneno (7354193, 9131585, null).
- Result Grid 7 (User)**: Shows rows for user_id 2, 3, and 4. Columns include user_type (student, faculty, student, teacher), user_name (ankit, arunit, arunit, arunit), user_age (22, 22, 22, 22), and user_phoneno (7354193, 9131585, null, null).