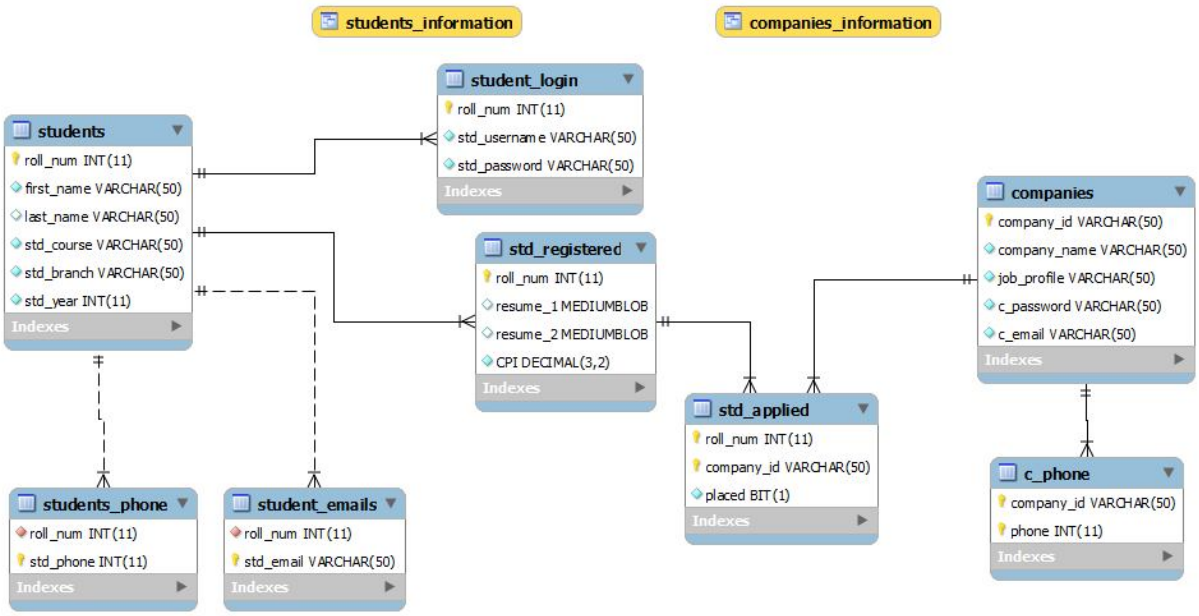
PLACEMENT PORTAL
GROUP #17

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DROP DATABASE placement_portal;
CREATE DATABASE placement_portal;
USE placement_portal;

CREATE TABLE students(
        roll_num INT NOT NULL PRIMARY KEY,
        first_name VARCHAR(50) NOT NULL,
        last_name VARCHAR(50),
        std_course VARCHAR(50) NOT NULL,
        std_branch VARCHAR(50) NOT NULL,
        std_year INT NOT NULL );

        INSERT INTO students VALUES
(11012322,'Naveen','Chaudhary','Btech','Mathematics',2015);
        INSERT INTO students VALUES (11012332,'Prashant','Sankhla','Btech','Civil',2015);
        INSERT INTO students VALUES
(11012342,'Ravindra','Gahlot','Btech','Biotechnology',2015);
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        INSERT INTO students VALUES (11012319,'Lokesh','Meena','Btech','CSE',2015);
        INSERT INTO students VALUES (11012312,'Parik','Gupta','Btech','Design',2015);

CREATE TABLE std_registered (
        roll_num INT NOT NULL PRIMARY KEY ,
   FOREIGN KEY (roll_num) REFERENCES students(roll_num) ON DELETE CASCADE ON
UPDATE CASCADE,
        resume_1 MEDIUMBLOB,
        resume_2 MEDIUMBLOB,
        CPI decimal(3,2) NOT NULL,
        CHECK (CPI >= 5.00));

INSERT INTO std_registered(roll_num,CPI) VALUES (11012322,6.52);
INSERT INTO std_registered(roll_num,CPI) VALUES (11012332,9.72);
INSERT INTO std_registered(roll_num,CPI) VALUES (11012319,5.99);
INSERT INTO std_registered(roll_num,CPI) VALUES (11012312,8.26);

CREATE TABLE student_login (
        roll_num INT NOT NULL PRIMARY KEY ,
   FOREIGN KEY (roll_num) REFERENCES students (roll_num) ON DELETE CASCADE ON
UPDATE CASCADE,
        std_username VARCHAR(50) NOT NULL ,
        std_password VARCHAR(50) NOT NULL);

INSERT INTO student_login VALUES (11012322,'n.chaudhary','123');
INSERT INTO student_login VALUES (11012332,'p.sankhla','123');
INSERT INTO student_login VALUES (11012342,'r.gahlot','123');
INSERT INTO student_login VALUES (11012319,'l.meena','123');
INSERT INTO student_login VALUES (11012312,'g.parik','123');

CREATE TABLE student_emails (
        roll_num INT NOT NULL ,
        std_email VARCHAR(50) NOT NULL ,
        PRIMARY KEY (std_email),
        FOREIGN KEY (roll_num ) REFERENCES students(roll_num) ON DELETE CASCADE
ON UPDATE CASCADE);

INSERT INTO student_emails VALUES (11012322,'n.chaudhary@iitg.ernet.in');
INSERT INTO student_emails VALUES (11012332,'p.sankhla@iitg.ernet.in');
INSERT INTO student_emails VALUES (11012342,'r.gahlot@iitg.ernet.in');
INSERT INTO student_emails VALUES (11012319,'l.meena@iitg.ernet.in ' );
INSERT INTO student_emails VALUES (11012312,'g.parik@iitg.ernet.in');
```

```
CREATE TABLE students_phone(
        roll_num INT NOT NULL,
        std_phone INT NOT NULL,
        PRIMARY KEY (std_phone),
        FOREIGN KEY (roll_num ) REFERENCES students(roll_num) ON DELETE CASCADE
ON UPDATE CASCADE);

INSERT INTO students_phone VALUES (11012322,97067227);
INSERT INTO students_phone VALUES (11012322,97067364);
INSERT INTO students_phone VALUES (11012332,98014562);
INSERT INTO students_phone VALUES (11012342,97064521);
INSERT INTO students_phone VALUES (11012319,80114961);
INSERT INTO students_phone VALUES (11012312,80116982);

CREATE TABLE companies (
        company_id VARCHAR(50) NOT NULL PRIMARY KEY,
        company_name VARCHAR(50) NOT NULL,
        job_profile VARCHAR(50) NOT NULL,
        c_password VARCHAR(50) NOT NULL,
        c_email VARCHAR(50) NOT NULL );

 INSERT INTO companies VALUES
('goo_dev','google','developer',md5('234'),'goo@hotmail.com');
 INSERT INTO companies VALUES
('goo_mar','google','marketing',md5('234'),'goo@hotmail.com');
 INSERT INTO companies VALUES
('fb_dev','facebook','developer',md5('234'),'fb@hotmail.com');
 INSERT INTO companies VALUES
('ms_dev','microsoft','developer',md5('234'),'ms@hotmail.com');


CREATE TABLE std_applied(
        roll_num INT,
        company_id VARCHAR(50),
        placed BIT NOT NULL,
        PRIMARY KEY (company_id,roll_num),
        FOREIGN KEY (company_id ) REFERENCES companies(company_id ) ON DELETE
CASCADE ON UPDATE CASCADE,
        FOREIGN KEY (roll_num) REFERENCES std_registered(roll_num) ON DELETE
CASCADE ON UPDATE CASCADE);

INSERT INTO std_applied VALUES (11012312,'goo_dev',0);
INSERT INTO std_applied VALUES (11012312,'goo_mar',0);
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```
INSERT INTO std_applied VALUES (11012319,'goo_mar',0);
INSERT INTO std_applied VALUES (11012319,'ms_dev',1);
INSERT INTO std_applied VALUES (11012322,'fb_dev',0);
INSERT INTO std_applied VALUES (11012332,'goo_dev',0);
INSERT INTO std_applied VALUES (11012332,'ms_dev',0);



CREATE TABLE c_phone(
        company_id VARCHAR(50),
        phone INT NOT NULL,
        PRIMARY KEY (company_id,phone),
        FOREIGN KEY (company_id ) REFERENCES companies(company_id ) ON DELETE
CASCADE ON UPDATE CASCADE);

INSERT INTO c_phone VALUES ('goo_dev',99576869);
INSERT INTO c_phone VALUES ('goo_mar',99576869);
INSERT INTO c_phone VALUES ('goo_mar',99574536);
INSERT INTO c_phone VALUES ('fb_dev',90856869);
INSERT INTO c_phone VALUES ('ms_dev',96549436);
INSERT INTO c_phone VALUES ('ms_dev',98653265);

CREATE VIEW students_information AS
SELECT students.roll_num,students.first_name,
students.last_name,student_login.std_username,student_login.std_password,students_phone.s
td_phone,
students.std_course,students.std_branch,student_emails.std_email,students.std_year FROM
students,student_login,student_emails,students_phone;

CREATE VIEW companies_information AS
SELECT companies.company_id,companies.job_profile,companies.company_name,
companies.c_password,companies.c_email,c_phone.phone FROM companies, c_phone;

DROP USER 'student_manager'@'localhost';
CREATE USER 'student_manager'@'localhost' IDENTIFIED BY 'pass1';
GRANT SELECT, INSERT,DELETE,UPDATE ON placement_portal.students_information TO
student_manager@localhost IDENTIFIED  BY 'pass1';


DROP USER 'company_manager'@'localhost';
CREATE USER 'company_manager'@'localhost' IDENTIFIED BY 'pass2';
```

GRANT SELECT, INSERT,DELETE,UPDATE ON placement_portal.companies_information TO company_manager@localhost IDENTIFIED BY 'pass2';

Functional Dependencies and Normal Forms:

roll_num	: RN	company_id	: CID
first_name	: FN	company_name	: CN
last_name	: LN	c_password	: CP
std_username	: SU	c_email	: CE
std_password	: SP	phone	: CPH
std_phone	: SPH	job_profile	:JP
std_course	: SC		
std_branch	: SB	placed	: PD
std_email	: SE		
std_year	: SY		
resume_1	: R1		
resume_2	: R2		
CPI	: C		

1. Students Table :
RN ---> RN FN LN SC SY SB

Since there is a PRIMARY KEY, no partial or transitive dependencies and no overlapping candidate keys
Therefore it is in BCNF

2. Registered Students Table :
RN ---> RN R1 R2 C
Since there is a PRIMARY KEY, no partial or transitive dependencies and no overlapping candidate keys
Therefore it is in BCNF

3. Students Application Table :
RN CID ---> RN CID PD
Since there is a PRIMARY KEY, no partial or transitive dependencies and no overlapping candidate keys
Therefore it is in BCNF

4. Companies Table :
CID ---> CID CN CP CE JP
Since there is a PRIMARY KEY, no partial or transitive dependencies and no overlapping candidate keys
Therefore it is in BCNF

5. Company Phone Table :
CPH CID-->CPH CID

Since there is a PRIMARY KEY, no partial or transitive dependencies and no overlapping candidate keys
Therefore it is in BCNF

6. Student Login Table
RN --> RN SU SP
SU --> RN SU SP

Since there is a primary key, therefore It is in 1NF
Since there are no partial dependencies, therefore it is in 2NF
But since there is a transitive dependency (RN-->SU , SU--->SP) , therefore it is not in 3NF

7. Student Phone Table
SPH ---> SPH RN
Since there is a PRIMARY KEY, no partial or transitive dependencies and no overlapping candidate keys
Therefore it is in BCNF

7. Student Email Table
SE --> SE RN
Since there is a PRIMARY KEY, no partial or transitive dependencies and no overlapping candidate keys
Therefore it is in BCNF