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* Add gender column for the student table[Enum]. It holds two value (male or female).
* CREATE TYPE gender AS ENUM('male','female');
* ALTER TABLE student ADD gender gender;
* Add birth date column for the student table.
* ALTER TABLE student ADD birthDate date;
* Delete the name column and replace it with two columns first name and last name.
* ALTER TABLE student DROP name;
* ALTER TABLE student ADD firstname varchar(25);
* ALTER TABLE student ADD lastname varchar(25);
* Delete the address and email column and replace it with contact info (Address, email) as object/Composite Data type.
* ALTER TABLE student DROP email;
* ALTER TABLE student DROP address;
* CREATE TYPE contactInfo AS (address varchar(25), email varchar(25));
* ALTER TABLE student ADD contactInfo contactInfo;
* Change any Serial Datatype at your tables to smallInt
* ALTER TABLE student ALTER id SET DATA TYPE smallint;
* ALTER TABLE student ALTER trackid SET DATA TYPE smallint;
* ALTER TABLE track ALTER id SET DATA TYPE smallint;
* ALTER TABLE course ALTER id SET DATA TYPE smallint;
* ALTER TABLE student\_phone ALTER studentid SET DATA TYPE smallint;
* ALTER TABLE student\_course ALTER studentid SET DATA TYPE smallint;
* ALTER TABLE student\_course ALTER courseid SET DATA TYPE smallint;
* ALTER TABLE track\_course ALTER courseid SET DATA TYPE smallint;
* ALTER TABLE track\_course ALTER trackid SET DATA TYPE smallint;
* Add/Alter foreign key constrains in Your Tables.
* ALTER TABLE student ADD CONSTRAINT fk1 FOREIGN KEY (trackid) REFERENCES track (id);
* ALTER TABLE student\_phone ADD CONSTRAINT fk2 FOREIGN KEY (studentid) REFERENCES student (id);
* ALTER TABLE student\_course ADD CONSTRAINT fk3 FOREIGN KEY (studentid) REFERENCES student (id);
* ALTER TABLE student\_course ADD CONSTRAINT fk4 FOREIGN KEY (courseid) REFERENCES course (id);
* ALTER TABLE track\_course ADD CONSTRAINT fk6 FOREIGN KEY (trackid) REFERENCES track (id);
* ALTER TABLE track\_course ADD CONSTRAINT fk5 FOREIGN KEY (courseid) REFERENCES course (id);
* Insert new data in all Tables.
* INSERT INTO track VALUES (6, 'Power BI');
* INSERT INTO student VALUES (6, 1, 'female', '9/8/2000', 'Sarah', 'Mohamed', ROW('Minyat Elnasr','sarah@gmail.com')),(7, 4, 'female', '6/8/2003', 'yara', 'Mohamed', ROW('Minyat Elnasr','yara@gmail.com')),(8, 5, 'male', '26/9/2007', 'Adham', 'Mohamed', ROW('Minyat Elnasr','adham@gmail.com')),(9, 3, 'male', '18/7/1972', 'Mohamed', 'Abdelrahman', ROW('Minyat Elnasr','mohamed@gmail.com')),(10, 2, 'female', '6/3/1976', 'Abeer', 'Mohamed', ROW('Minyat Elnasr','abeer@gmail.com'));
* INSERT INTO course VALUES (6, 'PostgreSQL', 'Database',100);
* INSERT INTO student\_phone VALUES (6,0102174532);
* INSERT INTO student\_course VALUES (6,6,'8/7/2023',93);
* INSERT INTO track\_course VALUES (6,6);
* Display all students’ information.
* SELECT \* FROM student;
* Display male students only.
* SELECT \* FROM student WHERE gender = 'male';
* Display the number of female students.
* SELECT COUNT(gender) AS count FROM student WHERE gender = 'female';
* Display the students who are born before 1992-10-01.
* SELECT \* FROM student WHERE birthdate < '1/10/1992';
* Display male students who are born before 1991-10-01.
* SELECT \* FROM student WHERE birthdate < '1/10/1991' AND gender = 'male';
* Display subjects and their max score sorted by max score.
* SELECT name, maxScore FROM course ORDER BY maxScore desc;
* Display the subject with highest max score
* SELECT name, maxScore FROM course ORDER BY maxScore desc LIMIT 1;
* Display students’ names that begin with A.
* SELECT CONCAT(firstname,' ',lastname) AS "Full Name" FROM student WHERE firstname LIKE 'A%';
* Display the number of students’ their name is “Mohammed”
* SELECT COUNT(firstname) FROM student WHERE firstname = 'Mohamed';
* Display the number of males and females.
* SELECT COUNT(gender), gender FROM student GROUP BY gender;
* Display the repeated first names and their counts if higher than 2.
* SELECT firstname, COUNT(firstname) AS Count FROM student GROUP BY firstname HAVING COUNT(firstname) > 2 ;

* Display the all Students and track name that belong to it
* SELECT CONCAT(s.firstname,' ',s.lastname) AS "Full Name", t.name FROM student s , track t WHERE s.trackid = t.id;
* (Bouns) Display students’ names, their score and subject name.
* SELECT CONCAT(s.firstname,' ',s.lastname) AS "Full Name", c.name, sc.examscore FROM student s , course c , student\_course sc WHERE s.id = sc.studentid AND c.id = sc.courseid;