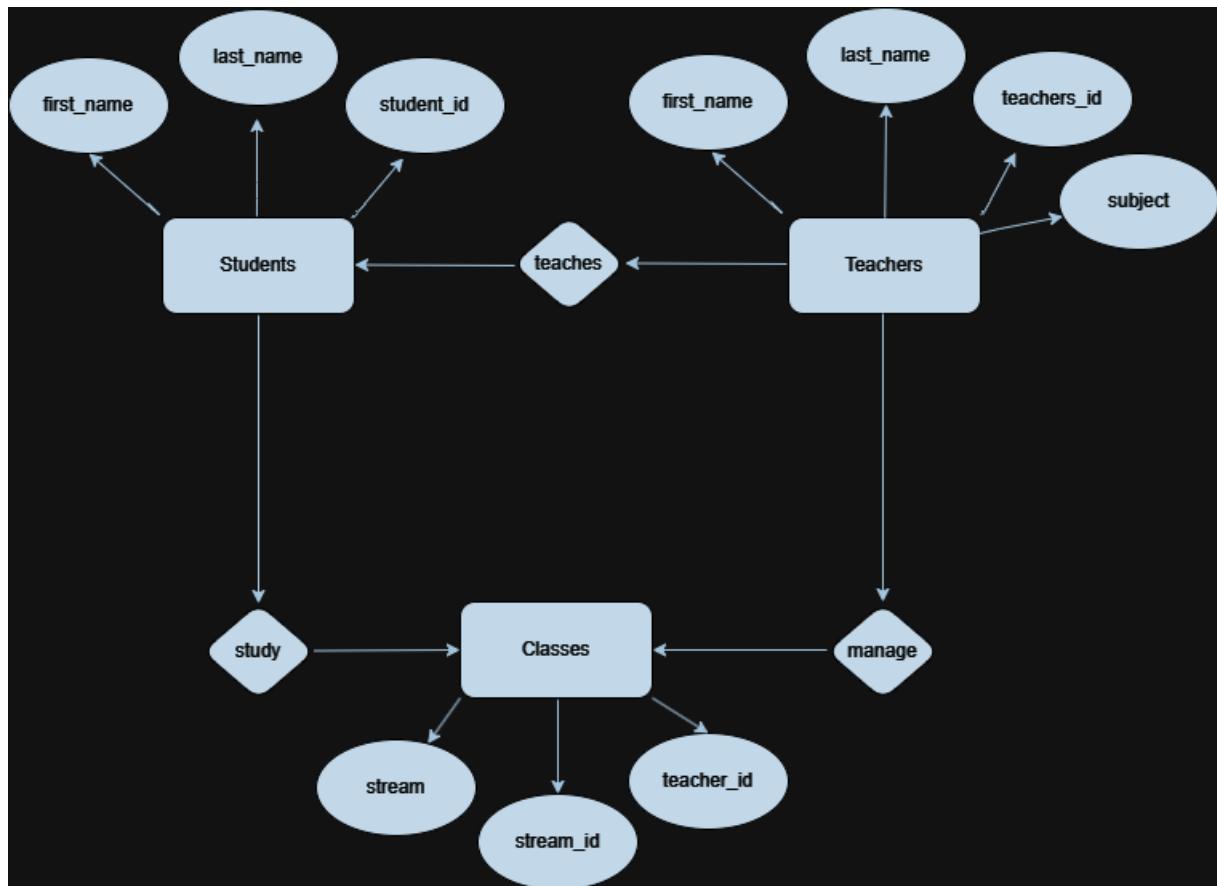


SQL TASK TARENTO

1. Create an ER diagram for
2. School management system



3. Add tables respective to ER diagrams

```
CREATE TABLE students (  
  student_id INT PRIMARY KEY,  
  first_name VARCHAR(50),  
  last_name VARCHAR(50)  
);
```

```
CREATE TABLE classes (  
stream_id INT PRIMARY KEY,  
teacher_id INT,  
stream VARCHAR(100),  
FOREIGN KEY (teacher_id) REFERENCES teachers(teacher_id)  
);
```

```
CREATE TABLE teachers (  
teacher_id INT PRIMARY KEY,  
first_name VARCHAR(50),  
last_name VARCHAR(50),  
subject VARCHAR(100)  
);
```

4. Add data to each table with minimum of 100 rows.

```
INSERT INTO students (student_id, first_name, last_name) VALUES  
(1, 'John', 'Doe'),  
(2, 'Emily', 'Smith'),  
(3, 'Michael', 'Johnson'),  
(4, 'Jessica', 'Brown'),  
(5, 'Daniel', 'Martinez'),  
(6, 'Sarah', 'Anderson'),  
(7, 'David', 'Wilson'),  
(8, 'Jennifer', 'Taylor'),  
(9, 'James', 'Lee'),  
(10, 'Emma', 'Garcia'),  
(11, 'Matthew', 'Davis'),  
(12, 'Olivia', 'Rodriguez'),  
(13, 'Christopher', 'Hernandez'),  
(14, 'Ava', 'Lopez'),  
(15, 'Alexander', 'Gonzalez'),  
(16, 'Megan', 'Miller'),
```

(17, 'Ryan', 'Jackson'),
(18, 'Sophia', 'Lewis'),
(19, 'Brandon', 'Walker'),
(20, 'Lauren', 'Perez'),
(21, 'Justin', 'Hall'),
(22, 'Grace', 'Young'),
(23, 'Nathan', 'White'),
(24, 'Taylor', 'Scott'),
(25, 'Hannah', 'Green'),
(26, 'Tyler', 'Adams'),
(27, 'Victoria', 'Baker'),
(28, 'William', 'Nelson'),
(29, 'Ella', 'Carter'),
(30, 'Andrew', 'Mitchell'),
(31, 'Madison', 'Roberts'),
(32, 'Joshua', 'Turner'),
(33, 'Chloe', 'Phillips'),
(34, 'Kevin', 'Campbell'),
(35, 'Samantha', 'Evans'),
(36, 'Robert', 'Morris'),
(37, 'Isabella', 'Hill'),
(38, 'Jason', 'Russell'),
(39, 'Aiden', 'Cruz'),
(40, 'Kayla', 'Howard'),
(41, 'Logan', 'Barnes'),
(42, 'Allison', 'Coleman'),
(43, 'Caleb', 'Long'),
(44, 'Hailey', 'Ward'),
(45, 'Ethan', 'Foster'),
(46, 'Lily', 'Torres'),
(47, 'Gabriel', 'Murphy'),
(48, 'Mia', 'Rivera'),
(49, 'Benjamin', 'Gomez'),
(50, 'Avery', 'Perry'),
(51, 'Jack', 'Powell'),
(52, 'Charlotte', 'Reed'),
(53, 'Jordan', 'Stewart'),
(54, 'Natalie', 'Sanchez'),
(55, 'Dylan', 'Price'),

(56, 'Makayla', 'Morgan'),
(57, 'Luke', 'Peterson'),
(58, 'Alyssa', 'Cooper'),
(59, 'Owen', 'Hayes'),
(60, 'Amelia', 'Simmons'),
(61, 'Connor', 'Gray'),
(62, 'Julia', 'Cole'),
(63, 'Isaac', 'Bennett'),
(64, 'Brooklyn', 'Bryant'),
(65, 'Gavin', 'Richardson'),
(66, 'Savannah', 'Alexander'),
(67, 'Elijah', 'Reyes'),
(68, 'Lillian', 'King'),
(69, 'Brandon', 'Cruz'),
(70, 'Madelyn', 'Hughes'),
(71, 'Aaron', 'Nelson'),
(72, 'Sydney', 'Myers'),
(73, 'Cameron', 'Ford'),
(74, 'Autumn', 'Wagner'),
(75, 'Adrian', 'Graham'),
(76, 'Morgan', 'Sullivan'),
(77, 'Henry', 'West'),
(78, 'Leah', 'Pearson'),
(79, 'Ian', 'Matthews'),
(80, 'Alexa', 'Dean'),
(81, 'Tristan', 'Ferguson'),
(82, 'Ashley', 'Riley'),
(83, 'Christian', 'Fisher'),
(84, 'Kylie', 'Gordon'),
(85, 'Zachary', 'Perkins'),
(86, 'Paige', 'Nichols'),
(87, 'Carter', 'Fuller'),
(88, 'Gianna', 'Gutierrez'),
(89, 'Colton', 'Murray'),
(90, 'Ariana', 'Lynch'),
(91, 'Dominic', 'Snyder'),
(92, 'Maria', 'Henderson'),
(93, 'Jayden', 'Davidson'),
(94, 'Bailey', 'Rose'),

(95, 'Jaxon', 'Newton'),
(96, 'Vanessa', 'Owens'),
(97, 'Timothy', 'Griffin'),
(98, 'Reagan', 'Harvey'),
(99, 'Peyton', 'Luna'),
(100, 'Lucas', 'Perkins');

INSERT INTO teachers (teacher_id, first_name, last_name, subject)
VALUES

(101, 'Emily', 'Johnson', 'Mathematics'),
(102, 'Michael', 'Williams', 'English Literature'),
(103, 'Jessica', 'Brown', 'Biology'),
(104, 'Daniel', 'Martinez', 'History'),
(105, 'Sarah', 'Anderson', 'Chemistry'),
(106, 'David', 'Wilson', 'Physics'),
(107, 'Jennifer', 'Taylor', 'Computer Science'),
(108, 'James', 'Lee', 'Geography'),
(109, 'Emma', 'Garcia', 'Art'),
(110, 'Matthew', 'Davis', 'Music'),
(111, 'Olivia', 'Rodriguez', 'Physical Education'),
(112, 'Christopher', 'Hernandez', 'Economics'),
(113, 'Ava', 'Lopez', 'Psychology'),
(114, 'Alexander', 'Gonzalez', 'Sociology'),
(115, 'Megan', 'Miller', 'Political Science'),
(116, 'Ryan', 'Jackson', 'Foreign Languages'),
(117, 'Sophia', 'Lewis', 'Environmental Science'),
(118, 'Brandon', 'Walker', 'Health Education'),
(119, 'Lauren', 'Perez', 'Business Studies'),
(120, 'Justin', 'Hall', 'Engineering'),
(121, 'Grace', 'Young', 'Literacy'),
(122, 'Nathan', 'White', 'Numeracy'),
(123, 'Taylor', 'Scott', 'Drama'),
(124, 'Hannah', 'Green', 'Religious Studies'),
(125, 'Tyler', 'Adams', 'Philosophy'),
(126, 'Victoria', 'Baker', 'Home Economics'),

(127, 'William', 'Nelson', 'Social Studies'),
(128, 'Ella', 'Carter', 'Anthropology'),
(129, 'Andrew', 'Mitchell', 'Archaeology'),
(130, 'Madison', 'Roberts', 'Astronomy'),
(131, 'Joshua', 'Turner', 'Botany'),
(132, 'Chloe', 'Phillips', 'Zoology'),
(133, 'Kevin', 'Campbell', 'Statistics'),
(134, 'Samantha', 'Evans', 'Ethics'),
(135, 'Robert', 'Morris', 'Criminology'),
(136, 'Isabella', 'Hill', 'Geology'),
(137, 'Jason', 'Russell', 'Oceanography'),
(138, 'Aiden', 'Cruz', 'Meteorology'),
(139, 'Kayla', 'Howard', 'Engineering Design'),
(140, 'Logan', 'Barnes', 'Graphic Design'),
(141, 'Allison', 'Coleman', 'Industrial Design'),
(142, 'Caleb', 'Long', 'Interior Design'),
(143, 'Hailey', 'Ward', 'Fashion Design'),
(144, 'Ethan', 'Foster', 'Web Design'),
(145, 'Lily', 'Torres', 'Game Design'),
(146, 'Gabriel', 'Murphy', 'Animation'),
(147, 'Mia', 'Rivera', 'Film Studies'),
(148, 'Benjamin', 'Gomez', 'Television Production'),
(149, 'Avery', 'Perry', 'Radio Broadcasting'),
(150, 'Jack', 'Powell', 'Journalism'),
(151, 'Charlotte', 'Reed', 'Creative Writing'),
(152, 'Jordan', 'Stewart', 'Poetry'),
(153, 'Natalie', 'Sanchez', 'Screenwriting'),
(154, 'Dylan', 'Price', 'Playwriting'),
(155, 'Makayla', 'Morgan', 'Novel Writing'),
(156, 'Luke', 'Peterson', 'Editing'),
(157, 'Alyssa', 'Cooper', 'Publishing'),
(158, 'Owen', 'Hayes', 'Digital Media'),
(159, 'Amelia', 'Simmons', 'Visual Arts'),
(160, 'Connor', 'Gray', 'Sculpture'),
(161, 'Julia', 'Cole', 'Painting'),
(162, 'Isaac', 'Bennett', 'Drawing'),
(163, 'Brooklyn', 'Bryant', 'Printmaking'),
(164, 'Gavin', 'Richardson', 'Photography'),
(165, 'Savannah', 'Alexander', 'Ceramics'),

(166, 'Elijah', 'Reyes', 'Textiles'),
(167, 'Lillian', 'King', 'Woodworking'),
(168, 'Brandon', 'Cruz', 'Metalworking'),
(169, 'Madelyn', 'Hughes', 'Glassworking'),
(170, 'Aaron', 'Nelson', 'Jewelry Making'),
(171, 'Sydney', 'Myers', 'Pottery'),
(172, 'Cameron', 'Ford', 'Basketry'),
(173, 'Autumn', 'Wagner', 'Calligraphy'),
(174, 'Adrian', 'Graham', 'Typography'),
(175, 'Morgan', 'Sullivan', 'Cartography'),
(176, 'Henry', 'West', 'Bookbinding'),
(177, 'Leah', 'Pearson', 'Engraving'),
(178, 'Ian', 'Matthews', 'Screen Printing'),
(179, 'Alexa', 'Dean', 'Origami'),
(180, 'Tristan', 'Ferguson', 'Quilting'),
(181, 'Ashley', 'Riley', 'Knitting'),
(182, 'Christian', 'Fisher', 'Crocheting'),
(183, 'Kylie', 'Gordon', 'Embroidery'),
(184, 'Zachary', 'Perkins', 'Macramé'),
(185, 'Paige', 'Nichols', 'Furniture Making'),
(186, 'Carter', 'Fuller', 'Carpentry'),
(187, 'Gianna', 'Gutierrez', 'Joinery'),
(188, 'Colton', 'Murray', 'Woodturning'),
(189, 'Ariana', 'Lynch', 'Blacksmithing'),
(190, 'Dominic', 'Snyder', 'Welding'),
(191, 'Maria', 'Henderson', 'Masonry'),
(192, 'Jayden', 'Davidson', 'Plumbing'),
(193, 'Bailey', 'Rose', 'Electrical Engineering'),
(194, 'Jaxon', 'Newton', 'Mechanical Engineering'),
(195, 'Vanessa', 'Owens', 'Civil Engineering'),
(196, 'Timothy', 'Griffin', 'Aerospace Engineering'),
(197, 'Reagan', 'Harvey', 'Chemical Engineering'),
(198, 'Peyton', 'Luna', 'Biomedical Engineering'),
(199, 'Lucas', 'Perkins', 'Environmental Engineering'),
(200, 'Ethan', 'Reid', 'Robotics');

```
INSERT INTO classes (stream_id, teacher_id, stream) VALUES
(1, 101, 'Mathematics'),
(2, 102, 'English Literature'),
(3, 103, 'Biology'),
(4, 104, 'History'),
(5, 105, 'Chemistry'),
(6, 106, 'Physics'),
(7, 107, 'Computer Science'),
(8, 108, 'Geography'),
(9, 109, 'Art'),
(10, 110, 'Music'),
(11, 111, 'Physical Education'),
(12, 112, 'Economics'),
(13, 113, 'Psychology'),
(14, 114, 'Sociology'),
(15, 115, 'Political Science'),
(16, 116, 'Foreign Languages'),
(17, 117, 'Environmental Science'),
(18, 118, 'Health Education'),
(19, 119, 'Business Studies'),
(20, 120, 'Engineering'),
(21, 121, 'Literacy'),
(22, 122, 'Numeracy'),
(23, 123, 'Drama'),
(24, 124, 'Religious Studies'),
(25, 125, 'Philosophy'),
(26, 126, 'Home Economics'),
(27, 127, 'Social Studies'),
(28, 128, 'Anthropology'),
(29, 129, 'Archaeology'),
(30, 130, 'Astronomy'),
(31, 131, 'Botany'),
(32, 132, 'Zoology'),
(33, 133, 'Statistics'),
(34, 134, 'Ethics'),
(35, 135, 'Criminology'),
(36, 136, 'Geology'),
(37, 137, 'Oceanography'),
(38, 138, 'Meteorology'),
```


(39, 139, 'Engineering Design'),
(40, 140, 'Graphic Design'),
(41, 141, 'Industrial Design'),
(42, 142, 'Interior Design'),
(43, 143, 'Fashion Design'),
(44, 144, 'Web Design'),
(45, 145, 'Game Design'),
(46, 146, 'Animation'),
(47, 147, 'Film Studies'),
(48, 148, 'Television Production'),
(49, 149, 'Radio Broadcasting'),
(50, 150, 'Journalism'),
(51, 151, 'Creative Writing'),
(52, 152, 'Poetry'),
(53, 153, 'Screenwriting'),
(54, 154, 'Playwriting'),
(55, 155, 'Novel Writing'),
(56, 156, 'Editing'),
(57, 157, 'Publishing'),
(58, 158, 'Digital Media'),
(59, 159, 'Visual Arts'),
(60, 160, 'Sculpture'),
(61, 161, 'Painting'),
(62, 162, 'Drawing'),
(63, 163, 'Printmaking'),
(64, 164, 'Photography'),
(65, 165, 'Ceramics'),
(66, 166, 'Textiles'),
(67, 167, 'Woodworking'),
(68, 168, 'Metalworking'),
(69, 169, 'Glassworking'),
(70, 170, 'Jewelry Making'),
(71, 171, 'Pottery'),
(72, 172, 'Basketry'),
(73, 173, 'Calligraphy'),
(74, 174, 'Typography'),
(75, 175, 'Cartography'),
(76, 176, 'Bookbinding'),
(77, 177, 'Engraving'),

(78, 178, 'Screen Printing'),
(79, 179, 'Origami'),
(80, 180, 'Quilting'),
(81, 181, 'Knitting'),
(82, 182, 'Crocheting'),
(83, 183, 'Embroidery'),
(84, 184, 'Macramé'),
(85, 185, 'Furniture Making'),
(86, 186, 'Carpentry'),
(87, 187, 'Joinery'),
(88, 188, 'Woodturning'),
(89, 189, 'Blacksmithing'),
(90, 190, 'Welding'),
(91, 191, 'Masonry'),
(92, 192, 'Plumbing'),
(93, 193, 'Electrical Engineering'),
(94, 194, 'Mechanical Engineering'),
(95, 195, 'Civil Engineering'),
(96, 196, 'Aerospace Engineering'),
(97, 197, 'Chemical Engineering'),
(98, 198, 'Biomedical Engineering'),
(99, 199, 'Environmental Engineering'),
(100, 200, 'Robotics');

6. Write an insert query to add new data for all the tables

```
insert into students values(101,'David','Ricard');  
insert into teachers values(201,'Donald','Das','Physics');  
insert into classes values (101, 201, 'Introduction to Linguistics');
```

7. Write an Delete query to delete any existing data for all the tables.

```
DELETE FROM students WHERE first_name = 'John';  
DELETE FROM teachers WHERE teacher_id = 101;  
DELETE FROM classes WHERE teacher_id = 102;
```

8. Write an Update query to update any existing data for all the tables.

```
UPDATE students SET last_name = 'Johnson' WHERE student_id = 1;
```

```
UPDATE teachers SET subject = 'Advanced Mathematics' WHERE  
teacher_id = 101;
```

```
UPDATE classes SET stream = 'Advanced Algebra' WHERE stream_id =  
1;
```