Create database school\_management\_system

**ROLES**

CREATE TABLE roles (

roleID INT AUTO\_INCREMENT PRIMARY KEY,

roleName varchar(50) NOT NULL

);

INSERT INTO `roles` (`roleID`, `roleName`) VALUES

('1', 'Student'),

('2', 'Teaching Staff'),

('3', 'Parent');

**Users**

CREATE TABLE `users` (

`ID` INT PRIMARY KEY AUTO\_INCREMENT,

`username` varchar(50) NOT NULL,

`email` varchar(100) NOT NULL,

`password` varchar(60) NOT NULL,

`roleID` INT NOT NULL,

FOREIGN KEY (roleID) REFERENCES roles (roleID) on DELETE CASCADE on UPDATE CASCADE

);

INSERT INTO `users` (`ID`, `username`, `email`, `password`, `roleID`) VALUES

(1, 'yousif\_adel', 'yousif.adel@example.com', 'password123', '2'),

(2, 'Mariam Salemm', 'mariam.salem@example.comm', '$2y$10$HHfh5mNn0g2LscCfR.tJ2uKGWiHSxB9nRCYzAygsQSWqCwRLlqKZW', '1'),

(3, 'mohamed\_ali', 'mohamed.ali@example.com', 'password789', '2'),

(4, 'fatma\_ahmed', 'fatma.ahmed@example.com', 'password321', '2'),

(5, 'youssef\_hassan', 'youssef.hassan@example.com', 'password654', '2'),

(6, 'sarah\_mohamed', 'sarah.mohamed@example.com', 'password987', '3'),

(7, 'mahmoud\_omar', 'mahmoud.omar@example.com', 'password111', '2'),

(8, 'dina\_abdelaziz', 'dina.abdelaziz@example.com', 'password222', '1'),

(9, 'mostafa\_eldeeb', 'mostafa.eldeeb@example.com', 'password333', '3'),

(10, 'nour\_saad', 'nour.saad@example.com', 'password444', '1'),

(11, 'mona\_elsayed', 'mona.elsayed@example.com', 'password555', '3'),

(12, 'karim\_sherif', 'karim.sherif@example.com', 'password666', '2'),

(13, 'maha\_nabil', 'maha.nabil@example.com', 'password777', '1'),

(14, 'ahmed\_elsayed', 'ahmed.elsayed@example.com', 'password888', '2'),

(15, 'rana\_ali', 'rana.ali@example.com', 'password999', '1'),

(16, 'amr\_salah', 'amr.salah@example.com', 'password000', '3'),

(17, 'hassan\_elsayed', 'hassan.elsayed@example.com', 'password12345', '2'),

(18, 'layla\_amine', 'layla.amine@example.com', 'password54321', '1'),

(19, 'osama\_tarek', 'osama.tarek@example.com', 'password11111', '3');

Admission

CREATE TABLE `admission` (

`ID` INT AUTO\_INCREMENT PRIMARY KEY,

`username` varchar(50) NOT NULL,

`email` varchar(100) NOT NULL,

`password` varchar(60) NOT NULL,

`roleID` INT NOT NULL,

`userID` INT DEFAULT NULL,

`status` enum('Pending','Approved','Rejected') DEFAULT 'Pending',

`created\_at` timestamp NOT NULL DEFAULT current\_timestamp(),

`updated\_at` timestamp NOT NULL DEFAULT current\_timestamp() ON UPDATE current\_timestamp(),

FOREIGN KEY(userID) REFERENCES users(ID) on DELETE CASCADE on UPDATE CASCADE,

FOREIGN KEY(roleID) REFERENCES roles(roleID) on DELETE CASCADE on UPDATE CASCADE

);

INSERT INTO `admission` (`ID`, `username`, `email`, `password`, `roleID`, `userID`, `status`, `created\_at`, `updated\_at`) VALUES

(2, 'yosifadel276', 'ya842245@gmail.com', '$2y$10$3ePW75RE.qDGlwjL76KCWO0GU3YxRrb1/XI4Iuo277epkXnX5inHq', '2', NULL, 'Pending', '2025-01-15 21:43:18', '2025-01-15 21:43:18'),

(3, 'parent', 'parent@ex.com', '$2y$10$Uzm1uMx.O4GOAFvsbNncjOcH42cGWo330kQB/UvlOMThAnI5VIVmi', '3', NULL, 'Pending', '2025-01-15 21:44:50', '2025-01-15 21:44:50'),

(4, 'student', 'student@student.com', '$2y$10$Vk5UB5YUTg.c8eY4YGqV7Oia51p.kf09M5dbwRiH2jAou6M7FVWEu', '1', NULL, 'Pending', '2025-01-15 21:45:38', '2025-01-15 21:45:38'),

(5, 'yosifadel276s', 'ssya842245@gmail.com', '$2y$10$2QZXF3efn2A4EQ.ESOpcmOY.k.N/JNB1byjnb3Ch349gakap6HNli', '1', NULL, 'Pending', '2025-01-19 05:41:25', '2025-01-19 05:41:25');

Attendance

CREATE TABLE `attendance` (

`ID` INT PRIMARY KEY AUTO\_INCREMENT,

`attendance\_date` date NOT NULL,

`attendance\_status` varchar(20) NOT NULL

);

INSERT INTO `attendance` (`ID`, `attendance\_date`, `attendance\_status`) VALUES

('1', '2025-01-01', 'Present'),

('10', '2025-01-10', 'Late'),

('11', '2025-01-11', 'Present'),

('12', '2025-01-12', 'Absent'),

('13', '2025-01-13', 'Present'),

('14', '2025-01-14', 'Late'),

('15', '2025-01-15', 'Present'),

('16', '2025-01-16', 'Absent'),

('17', '2025-01-17', 'Present'),

('18', '2025-01-18', 'Absent'),

('19', '2025-01-19', 'Present'),

('2', '2025-01-02', 'Absent'),

('20', '2025-01-20', 'Late'),

('3', '2025-01-03', 'Present'),

('4', '2025-01-04', 'Absent'),

('5', '2025-01-05', 'Present'),

('6', '2025-01-06', 'Late'),

('7', '2025-01-07', 'Present'),

('8', '2025-01-08', 'Absent'),

('9', '2025-01-09', 'Present');

CREATE TABLE `books` (

`ID` INT PRIMARY KEY AUTO\_INCREMENT,

`name` varchar(60) NOT NULL,

`author` varchar(50) NOT NULL

);

INSERT INTO `books` (`ID`, `name`, `author`) VALUES

('1', 'Mathematics for Kids', 'John Doe'),

('10', 'Fun with Chemistry: A Kid’s Guide', 'James Harris'),

('11', 'Computer Science for Students', 'William Scott'),

('12', 'How to Solve Math Problems', 'Linda Davis'),

('13', 'World History for Teens', 'Charles Johnson'),

('14', 'Study Hacks for School Success', 'Olivia Robinson'),

('15', 'Creative Writing for Young Writers', 'Megan King'),

('2', 'Science Fun: A Beginner’s Guide', 'Emily Green'),

('3', 'Learning English: Grammar Basics', 'Sarah Lee'),

('4', 'History for Beginners', 'Michael Brown'),

('5', 'Geography: Exploring the World', 'Rachel Adams'),

('6', 'The Ultimate Guide to Study Skills', 'David White'),

('7', 'Introduction to Biology', 'Anna Clark'),

('8', 'Understanding Physics: A School Student’s Guide', 'Richard Turner'),

('9', 'Learning Through Art', 'Sophia Walker');

CREATE TABLE `classes` (

`ID` INT PRIMARY KEY AUTO\_INCREMENT,

`className` varchar(50) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_general\_ci;

INSERT INTO `classes` (`ID`, `className`) VALUES

('1', 'Mathematics - Grade 1'),

('10', 'Mathematics - Grade 10'),

('11', 'English Literature - Grade 11'),

('12', 'Computer Science - Grade 12'),

('13', 'Physical Education - Grade 1'),

('14', 'Art and Design - Grade 3'),

('15', 'Music - Grade 4'),

('2', 'Science - Grade 2'),

('3', 'English Language - Grade 3'),

('4', 'Social Studies - Grade 4'),

('5', 'Geography - Grade 5'),

('6', 'History - Grade 6'),

('7', 'Biology - Grade 7'),

('8', 'Chemistry - Grade 8'),

('9', 'Physics - Grade 9');

CREATE TABLE `fees` (

`ID` INT PRIMARY KEY AUTO\_INCREMENT,

`feeDate` date NOT NULL,

`feeAmount` varchar(20) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_general\_ci;

INSERT INTO `fees` (`ID`, `feeDate`, `feeAmount`) VALUES

('1', '2025-01-01', '1000.00'),

('10', '2025-01-28', '1400.60'),

('11', '2025-02-01', '1250.30'),

('12', '2025-02-05', '1350.00'),

('13', '2025-02-07', '1000.00'),

('14', '2025-02-10', '1450.50'),

('15', '2025-02-12', '1100.00'),

('16', '2025-02-15', '1150.75'),

('17', '2025-02-18', '1300.00'),

('18', '2025-02-20', '900.00'),

('19', '2025-02-22', '1400.80'),

('2', '2025-01-05', '1500.50'),

('20', '2025-02-25', '1200.00'),

('3', '2025-01-10', '1200.75'),

('4', '2025-01-12', '1100.00'),

('5', '2025-01-15', '900.25'),

('6', '2025-01-18', '1300.80'),

('7', '2025-01-20', '950.10'),

('8', '2025-01-22', '1600.00'),

('9', '2025-01-25', '1050.45');

CREATE TABLE `parents` (

`ID` INT PRIMARY KEY AUTO\_INCREMENT,

`name` varchar(50) NOT NULL,

`relation\_type` varchar(20) NOT NULL,

`address` varchar(50) NOT NULL,

`user\_id` INT DEFAULT NULL,

FOREIGN KEY(user\_id) REFERENCES users(ID) on DELETE CASCADE on UPDATE CASCADE

);

INSERT INTO `parents` (`ID`, `name`, `relation\_type`, `address`, `user\_id`) VALUES

('1', 'Sarah Mohamed', 'Mother', 'Cairo, Egypt', 6),

('10', 'Samiha Mahmoud', 'Mother', 'Zamalek, Cairo, Egypt', NULL),

('12', 'Tamer Ghanem', 'Father', 'Nasr City, Cairo, Egypt', NULL),

('13', 'Laila Farouk', 'Mother', 'New Cairo, Cairo, Egypt', NULL),

('14', 'Ahmed Saad', 'Father', '6th of October City, Cairo, Egypt', NULL),

('15', 'Rania Nabil', 'Mother', 'Shubra, Cairo, Egypt', NULL),

('2', 'Mostafa Eldeeb', 'Father', 'Cairo, Egypt', 9),

('3', 'Mona Elsayed', 'Mother', 'Cairo, Egypt', 11),

('4', 'Amr Salah', 'Father', 'Cairo, Egypt', 16),

('5', 'Osama Tarek', 'Father', 'Cairo, Egypt', 19),

('7', 'Hassan ElShamy', 'Father', 'Heliopolis, Cairo, Egypt', NULL),

('8', 'Farida AlSayed', 'Mother', 'Maadi, Cairo, Egypt', NULL);

CREATE TABLE `parentphones` (

`parent\_ID` INT NOT NULL,

`phone\_number` VARCHAR(20) NOT NULL,

CONSTRAINT `fk\_parentphones\_parent`

FOREIGN KEY (`parent\_ID`) REFERENCES `parents`(`ID`)

ON DELETE CASCADE

ON UPDATE CASCADE

);

INSERT INTO `parentphones` (`parent\_ID`, `phone\_number`) VALUES

('1', '01012345678'),

('10', '01155566677'),

('11', '01088877766'),

('11', '01211100099'),

('12', '01055544433'),

('12', '01133344455'),

('13', '01222233344'),

('13', '01588899922'),

('14', '01599988877'),

('15', '01188877799'),

('15', '01244455566'),

('2', '01122334455'),

('2', '01555667788'),

('3', '01055566677'),

('3', '01244433322'),

('4', '01022233344'),

('4', '01288899900'),

('5', '01544455566'),

('7', '01100099988'),

('7', '01233344455'),

('8', '01012312345'),

('8', '01177788899');

CREATE TABLE `students` (

`id` INT PRIMARY KEY AUTO\_INCREMENT,

`name` varchar(50) NOT NULL,

`BOD` date NOT NULL,

`admission\_date` date NOT NULL,

`gender` varchar(10) NOT NULL,

`student\_status` varchar(20) NOT NULL,

`feeID` INT DEFAULT NULL,

`classID` INT DEFAULT NULL,

`user\_id` INT DEFAULT NULL,

FOREIGN KEY(feeID) REFERENCES fees(ID) ON DELETE CASCADE on UPDATE CASCADE,

FOREIGN KEY(classID) REFERENCES classes(ID) ON DELETE CASCADE on UPDATE CASCADE,

FOREIGN KEY(user\_id) REFERENCES users(ID) ON DELETE CASCADE on UPDATE CASCADE

);

INSERT INTO `students` (`id`, `name`, `BOD`, `admission\_date`, `gender`, `student\_status`, `feeID`, `classID`, `user\_id`) VALUES

(1, 'Mariam Salemm', '2025-01-21', '2021-09-01', 'Female', 'Active', '1', '1', 2),

(2, 'Dina Abdelaziz', '2007-08-20', '2022-09-01', 'Female', 'Active', '2', '2', 8),

(3, 'Nour Saad', '2005-11-10', '2020-09-01', 'Female', 'Active', '3', '3', 10),

(4, 'Maha Nabil', '2006-03-25', '2021-09-01', 'Female', 'Graduated', '4', '4', 13),

(5, 'Rana Ali', '2007-12-05', '2022-09-01', 'Female', 'Active', '5', '5', 15),

(6, 'Layla Amine', '2008-01-15', '2023-09-01', 'Female', 'Active', '6', '6', 18),

(7, 'Ahmed Hossam', '2006-07-10', '2021-09-01', 'Male', 'Graduated', '7', '1', NULL),

(8, 'Khaled Mostafa', '2005-09-30', '2020-09-01', 'Male', 'Suspended', '8', '2', NULL),

(9, 'Salma Hassan', '2007-02-18', '2022-09-01', 'Female', 'Active', '9', '3', NULL),

(10, 'Omar Adel', '2006-11-22', '2021-09-01', 'Male', 'Active', '10', '4', NULL),

(11, 'Fatma Ibrahim', '2008-03-12', '2023-09-01', 'Female', 'Suspended', '11', '5', NULL),

(12, 'Huda Mahmoud', '2007-01-01', '2022-09-01', 'Female', 'Active', '12', '6', NULL),

(13, 'Youssef Tarek', '2005-05-05', '2020-09-01', 'Male', 'Suspended', '13', '1', NULL),

(14, 'Amira Saeed', '2007-10-10', '2022-09-01', 'Female', 'Active', '7', '2', NULL),

(15, 'Rami Ahmed', '2006-12-25', '2021-09-01', 'Male', 'Graduated', '15', '3', NULL);

CREATE TABLE `studentphones` (

`student\_id` INT NOT NULL,

`phone\_number` VARCHAR(20) NOT NULL,

CONSTRAINT `fk\_studentphones\_student`

FOREIGN KEY (`student\_id`) REFERENCES `students`(`ID`)

ON DELETE CASCADE

ON UPDATE CASCADE

);

INSERT INTO `studentphones` (`student\_id`, `phone\_number`) VALUES

(1, '01012345678'),

(2, '01122334455'),

(2, '01555667788'),

(3, '01234567890'),

(3, '1199988877'),

(4, '01066655544'),

(4, '01544433322'),

(5, '01188877766'),

(6, '01233311100'),

(6, '01500099988'),

(7, '01100099988'),

(7, '01233344455'),

(8, '01066655544'),

(8, '01077788899'),

(9, '01099988877'),

(9, '01522211100'),

(10, '01222233344'),

(12, '01055544433'),

(12, '01088855544'),

(13, '01088855544'),

(13, '01199911188'),

(14, '01211122233'),

(15, '01033344455'),

(15, '01577799988');

CREATE TABLE `teachingstaffphones` (

`teachingstaff\_id` INT NOT NULL,

`phone\_number` VARCHAR(20) NOT NULL,

CONSTRAINT `fk\_teachingstaffphones\_student`

FOREIGN KEY (`teachingstaff\_id`) REFERENCES `teachingstaff`(`ID`)

ON DELETE CASCADE

ON UPDATE CASCADE

);

INSERT INTO `teachingstaffphones` (`teachingstaff\_id`, `phone\_number`) VALUES

('1', '01001234567'),

('1', '01002345678'),

('2', '01003456789'),

('2', '01004567890'),

('3', '01005678901'),

('3', '01006789012'),

('4', '01007890123'),

('4', '01008901234'),

('5', '01009123456'),

('5', '01001234589'),

('6', '01003456712'),

('6', '01004567845'),

('7', '01005678978'),

('8', '01006789089'),

('8', '01007890190');

CREATE TABLE `classattendance` (

`classID` INT DEFAULT NULL,

`attendanceID` INT DEFAULT NULL,

`teachingstaff\_ID` INT DEFAULT NULL,

`subjectID` INT DEFAULT NULL,

`studentID` INT NOT NULL,

FOREIGN KEY (classID) REFERENCES classes(ID) ON DELETE CASCADE on UPDATE CASCADE,

FOREIGN KEY (attendanceID) REFERENCES attendance(ID) ON DELETE CASCADE on UPDATE CASCADE,

FOREIGN KEY (teachingstaff\_ID) REFERENCES teachingstaff(ID) ON DELETE CASCADE on UPDATE CASCADE,

FOREIGN KEY (subjectID) REFERENCES subjects(ID) ON DELETE CASCADE on UPDATE CASCADE,

FOREIGN KEY (studentID) REFERENCES students(ID) ON DELETE CASCADE on UPDATE CASCADE

);

INSERT INTO `classattendance` (`classID`, `attendanceID`, `teachingstaff\_ID`, `subjectID`, `studentID`) VALUES

('1', '1', '2', '1', 1),

('1', '2', '1', '2', 2),

('2', '3', '2', '3', 3),

('2', '4', '2', '4', 4),

('3', '5', '2', '5', 5),

('4', '7', '3', '7', 7),

('4', '1', '3', '1', 8),

('5', '2', '3', '2', 9),

('5', '3', '3', '3', 10),

('6', '4', '4', '4', 11),

('6', '5', '4', '5', 12),

('7', '7', '4', '7', 14),

('8', '8', '5', '1', 15),

('8', '9', '5', '2', 1),

('9', '10', '5', '3', 3),

('9', '11', '5', '4', 4),

('10', '12', '5', '5', 5),

('11', '14', '6', '7', 7),

('11', '15', '6', '1', 11),

('12', '16', '6', '2', 2),

('12', '17', '6', '3', 2),

('13', '18', '7', '4', 4),

('13', '19', '7', '5', 10),

('14', '1', '2', '7', 8),

('15', '3', '4', '7', 1);

CREATE TABLE `exam` (

`ID` INT PRIMARY KEY AUTO\_INCREMENT,

`exam\_date` date NOT NULL,

`grade` varchar(10) NOT NULL,

`studentID` INT NOT NULL,

`subjectID` INT NOT NULL,

FOREIGN KEY(studentID) REFERENCES students(ID) ON DELETE CASCADE on UPDATE CASCADE,

FOREIGN KEY(subjectID) REFERENCES subjects(ID) ON DELETE CASCADE on UPDATE CASCADE

);

INSERT INTO `exam` (`ID`, `exam\_date`, `grade`, `studentID`, `subjectID`) VALUES

('1', '2025-01-10', 'A', 1, '1'),

('10', '2025-01-12', 'C+', 4, '2'),

('11', '2025-01-15', 'A', 5, '3'),

('12', '2025-01-18', 'B', 10, '4'),

('13', '2025-01-20', 'A-', 11, '5'),

('15', '2025-01-25', 'C', 9, '7'),

('16', '2025-01-28', 'B-', 8, '7'),

('17', '2025-01-10', 'B', 11, '1'),

('18', '2025-01-12', 'A+', 7, '2'),

('19', '2025-01-15', 'B+', 5, '3'),

('2', '2025-01-12', 'B+', 1, '2'),

('20', '2025-01-18', 'A-', 12, '4'),

('21', '2025-01-20', 'B', 6, '5'),

('23', '2025-01-25', 'A', 13, '7'),

('24', '2025-01-28', 'B-', 14, '7'),

('25', '2025-01-10', 'A-', 3, '1'),

('26', '2025-01-12', 'B+', 3, '2'),

('27', '2025-01-15', 'C', 3, '3'),

('28', '2025-01-18', 'B', 4, '4'),

('29', '2025-01-20', 'A', 4, '5'),

('3', '2025-01-15', 'A-', 1, '3'),

('31', '2025-01-25', 'A+', 5, '7'),

('33', '2025-01-10', 'B-', 6, '1'),

('34', '2025-01-12', 'C+', 6, '2'),

('35', '2025-01-15', 'A+', 6, '3'),

('36', '2025-01-18', 'B', 7, '4'),

('37', '2025-01-20', 'A-', 7, '5'),

('39', '2025-01-25', 'A', 8, '2'),

('4', '2025-01-18', 'B', 1, '4'),

('40', '2025-01-28', 'B+', 8, '7'),

('41', '2025-01-10', 'B-', 9, '1'),

('42', '2025-01-12', 'C+', 9, '2'),

('43', '2025-01-15', 'A+', 9, '3'),

('44', '2025-01-18', 'B', 12, '4'),

('45', '2025-01-20', 'A-', 11, '5'),

('47', '2025-01-25', 'A', 13, '7'),

('48', '2025-01-28', 'B+', 12, '4'),

('5', '2025-01-20', 'C', 1, '5'),

('7', '2025-01-12', 'B', 2, '7'),

('8', '2025-01-15', 'A+', 2, '2'),

('9', '2025-01-10', 'B+', 3, '1');

CREATE TABLE `studentparents` (

`studentID` INT NOT NULL,

`ParentID` INT NOT NULL,

PRIMARY KEY(studentID, parentID),

FOREIGN KEY (studentID) REFERENCES students(ID) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY (ParentID) REFERENCES parents(ID) ON DELETE CASCADE ON UPDATE CASCADE

);

INSERT INTO `studentparents` (`studentID`, `ParentID`) VALUES

(1, '1'),

(1, '2'),

(2, '3'),

(2, '4'),

(3, '5'),

(4, '5'),

(5, '7'),

(6, '8'),

(7, '8'),

(7, '12'),

(8, '10'),

(8, '14'),

(9, '13'),

(15, '1'),

(15, '2'),

(14, '4'),

(14, '5');