School Management System Database

CREATE TABLE users (

user\_id INT PRIMARY KEY AUTO\_INCREMENT,

username VARCHAR(50) UNIQUE NOT NULL,

password VARCHAR(255) NOT NULL,

role ENUM('Admin', 'Teacher', 'Student', 'Parent') NOT NULL

);

CREATE TABLE school\_type (

school\_type\_id INT PRIMARY KEY AUTO\_INCREMENT,

school\_type\_name VARCHAR(50) NOT NULL

);

INSERT INTO school\_type (school\_type\_name) VALUES

('Primary'),

('Higher'),

('Higher Secondary');

CREATE TABLE classes (

class\_id INT PRIMARY KEY AUTO\_INCREMENT,

class\_name VARCHAR(20) NOT NULL,

section char(1),

school\_type\_id INT,

FOREIGN KEY (school\_type\_id) REFERENCES school\_type(school\_type\_id)

);

INSERT INTO classes (class\_name, section, school\_type\_id) VALUES

('1', 'A', 1),

('1', 'B', 1),

('5', 'A', 1),

('8', 'A', 2),

('8', 'B', 2),

('10', 'A', 3),

('10', 'B', 3),

('12', 'A', 3),

('12', 'B', 3);

CREATE TABLE subjects (

subject\_id INT PRIMARY KEY AUTO\_INCREMENT,

subject\_name VARCHAR(50) NOT NULL,

class\_id int,

FOREIGN key(class\_id) REFERENCES classes(class\_id)

);

|  | | | | [**subject\_id**](http://localhost/phpmyadmin/index.php?route=/sql&db=school_management_system&table=subjects&sql_query=SELECT+%2A+FROM+%60subjects%60++%0AORDER+BY+%60subjects%60.%60subject_id%60+ASC&sql_signature=9b6942c8349a63b1129c4202789bb55b37966b4e5fd7f082025ca0fa414fd236&session_max_rows=25&is_browse_distinct=0) | [**subject\_name**](http://localhost/phpmyadmin/index.php?route=/sql&db=school_management_system&table=subjects&sql_query=SELECT+%2A+FROM+%60subjects%60++%0AORDER+BY+%60subjects%60.%60subject_name%60+ASC&sql_signature=f2f2aaf9f976f26e05d67cbb03771e6941e816643814bf2a75285b30eb405df5&session_max_rows=25&is_browse_distinct=0) | [**class\_id**](http://localhost/phpmyadmin/index.php?route=/sql&db=school_management_system&table=subjects&sql_query=SELECT+%2A+FROM+%60subjects%60++%0AORDER+BY+%60subjects%60.%60class_id%60+ASC&sql_signature=d481378c1fbebad4902841b28221dc541ff47ddb4a17abaf305c742d78c490ae&session_max_rows=25&is_browse_distinct=0) |  | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | [Edit Edit](http://localhost/phpmyadmin/index.php) | [Copy Copy](http://localhost/phpmyadmin/index.php) | [Delete Delete](http://localhost/phpmyadmin/index.php) | 1 | maths | [1](http://localhost/phpmyadmin/index.php?route=/sql&db=school_management_system&table=classes&pos=0&sql_signature=a398e64ffb7e48a324e94a6a6f81f511f338ab0ba0a08350b80c0df84ec31de9&sql_query=SELECT+%2A+FROM+%60school_management_system%60.%60classes%60+WHERE+%60class_id%60+%3D+1) |  |  |  |  |
|  | [Edit Edit](http://localhost/phpmyadmin/index.php) | [Copy Copy](http://localhost/phpmyadmin/index.php) | [Delete Delete](http://localhost/phpmyadmin/index.php) | 2 | science | [1](http://localhost/phpmyadmin/index.php?route=/sql&db=school_management_system&table=classes&pos=0&sql_signature=a398e64ffb7e48a324e94a6a6f81f511f338ab0ba0a08350b80c0df84ec31de9&sql_query=SELECT+%2A+FROM+%60school_management_system%60.%60classes%60+WHERE+%60class_id%60+%3D+1) |  |  |  |  |
|  | [Edit Edit](http://localhost/phpmyadmin/index.php) | [Copy Copy](http://localhost/phpmyadmin/index.php) | [Delete Delete](http://localhost/phpmyadmin/index.php) | 3 | Account | [19](http://localhost/phpmyadmin/index.php?route=/sql&db=school_management_system&table=classes&pos=0&sql_signature=ec8b3ad4eb39efdc0977a0841665c396ea46b9040df91993e03765ec74012bc8&sql_query=SELECT+%2A+FROM+%60school_management_system%60.%60classes%60+WHERE+%60class_id%60+%3D+19) |  |  |  |  |
|  | [Edit Edit](http://localhost/phpmyadmin/index.php) | [Copy Copy](http://localhost/phpmyadmin/index.php) | [Delete Delete](http://localhost/phpmyadmin/index.php) | 4 | Statstics | [19](http://localhost/phpmyadmin/index.php?route=/sql&db=school_management_system&table=classes&pos=0&sql_signature=ec8b3ad4eb39efdc0977a0841665c396ea46b9040df91993e03765ec74012bc8&sql_query=SELECT+%2A+FROM+%60school_management_system%60.%60classes%60+WHERE+%60class_id%60+%3D+19) |  |  |  |  |

CREATE TABLE teachers (

teacher\_id INT PRIMARY KEY AUTO\_INCREMENT,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

gender varchar(10),

dob date,

doj date,

religion varchar(50),

address varchar(100),

phone int,

email varchar(50)

);

INSERT INTO teachers

(first\_name, last\_name, gender, dob, doj, religion, address, phone, email)

VALUES

('Amit', 'Sharma', 'Male', '1980-04-12', '2010-06-15', 'Hindu', '123 MG Road, Bhopal', 9876543210, 'amit.sharma@example.com'),

('Priya', 'Verma', 'Female', '1985-09-08', '2012-07-20', 'Hindu', '56 Park Street, Indore', 9876543211, 'priya.verma@example.com'),

('Rakesh', 'Gupta', 'Male', '1978-02-20', '2009-04-01', 'Hindu', '45 Patel Nagar, Bhopal', 9876543212, 'rakesh.gupta@example.com'),

('Sunita', 'Kumari', 'Female', '1983-11-15', '2011-05-10', 'Hindu', '89 Shanti Vihar, Bhopal', 9876543213, 'sunita.kumari@example.com'),

('Mohammed', 'Aslam', 'Male', '1975-06-05', '2008-03-12', 'Muslim', '21 Noor Colony, Bhopal', 9876543214, 'mohammed.aslam@example.com'),

('Neha', 'Joshi', 'Female', '1990-01-25', '2015-08-18', 'Hindu', '76 Ashok Nagar, Indore', 9876543215, 'neha.joshi@example.com'),

('Anil', 'Patel', 'Male', '1982-07-10', '2013-02-05', 'Hindu', '14 Rajendra Nagar, Bhopal', 9876543216, 'anil.patel@example.com'),

('Kavita', 'Singh', 'Female', '1988-03-30', '2016-09-25', 'Hindu', '98 Lakshmi Nagar, Bhopal', 9876543217, 'kavita.singh@example.com'),

('Rajesh', 'Mehta', 'Male', '1979-12-12', '2011-12-15', 'Jain', '65 Shyam Nagar, Indore', 9876543218, 'rajesh.mehta@example.com'),

('Shalini', 'Mishra', 'Female', '1992-05-18', '2017-07-01', 'Hindu', '32 Kasturba Nagar, Bhopal', 9876543219, 'shalini.mishra@example.com');

CREATE TABLE class\_teacher (

id INT PRIMARY KEY AUTO\_INCREMENT,

class\_id INT,

subject\_id INT,

teacher\_id INT,

FOREIGN KEY (class\_id) REFERENCES classes(class\_id),

FOREIGN KEY (subject\_id) REFERENCES subjects(subject\_id),

FOREIGN KEY (teacher\_id) REFERENCES teachers(teacher\_id)

);

CREATE TABLE students (

student\_id INT PRIMARY KEY AUTO\_INCREMENT,

class\_id INT,

school\_type\_id INT,

first\_name VARCHAR(50) NOT NULL,

last\_name VARCHAR(50) NOT NULL,

father\_name VARCHAR(50) NOT NULL,

mother\_name VARCHAR(50) NOT NULL,

gender varchar(10),

dob date,

religion varchar(50),

address varchar(100),

phone int,

email varchar(50),

admission\_date date,

FOREIGN KEY (class\_id) REFERENCES classes(class\_id),

FOREIGN KEY (school\_type\_id) REFERENCES school\_type(school\_type\_id)

);

CREATE TABLE marks (

mark\_id INT PRIMARY KEY AUTO\_INCREMENT,

student\_id INT NOT NULL,

subject\_id INT NOT NULL,

exam\_type ENUM('Midterm', 'Final', 'Unit Test') NOT NULL,

marks\_obtained DECIMAL(5,2) NOT NULL,

max\_marks DECIMAL(5,2) NOT NULL,

exam\_date DATE,

FOREIGN KEY (student\_id) REFERENCES students(student\_id),

FOREIGN KEY (subject\_id) REFERENCES subjects(subject\_id)

);

INSERT INTO marks (student\_id, subject\_id, exam\_type, marks\_obtained, max\_marks, exam\_date)

VALUES

(1, 1, 'Midterm', 45, 50, '2025-07-15'),

(2, 2, 'Midterm', 38, 50, '2025-07-15'),

(3, 3, 'Unit Test', 42, 50, '2025-08-10'),

(4, 1, 'Final', 88, 100, '2025-11-30')

CREATE TABLE attendance (

attendance\_id INT PRIMARY KEY AUTO\_INCREMENT,

student\_id INT NOT NULL,

class\_id INT NOT NULL,

attendance\_date DATE NOT NULL,

status ENUM('Present', 'Absent') NOT NULL,

FOREIGN KEY (student\_id) REFERENCES students(student\_id),

FOREIGN KEY (class\_id) REFERENCES classes(class\_id)

);

INSERT INTO attendance (student\_id, class\_id, attendance\_date, status)

VALUES

(1, 1, '2025-08-01', 'Present'),

(2, 1, '2025-08-01', 'Absent'),

(3, 2, '2025-08-01', 'Present'),

(4, 2, '2025-08-01', 'Present')

CREATE TABLE monthly\_attendance\_summary (

summary\_id INT PRIMARY KEY AUTO\_INCREMENT,

student\_id INT,

month YEAR(4) NOT NULL,

month\_number INT NOT NULL,

total\_working\_days INT,

total\_present\_days INT,

total\_absent\_days INT,

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

);

INSERT INTO monthly\_attendance\_summary

(student\_id, month, month\_number, total\_working\_days, total\_present\_days, total\_absent\_days)

SELECT

student\_id,

DATE\_FORMAT(attendance\_date, '%M') AS month,

MONTH(attendance\_date) AS month\_number,

COUNT(\*) AS total\_working\_days,

SUM(status = 'Present') AS total\_present\_days,

SUM(status = 'Absent') AS total\_absent\_days

FROM

attendance

WHERE

YEAR(attendance\_date) = YEAR(CURDATE())

AND MONTH(attendance\_date) = MONTH(CURDATE() - INTERVAL 1 MONTH)

GROUP BY

student\_id, YEAR(attendance\_date), MONTH(attendance\_date);

INSERT INTO monthly\_attendance\_summary

(student\_id, month, month\_number, total\_working\_days, total\_present\_days, total\_absent\_days)

VALUES

(1, 2025, 1, 22, 20, 2), -- Jan

(2, 2025, 1, 22, 19, 3), -- Jan

(3, 2025, 1, 22, 21, 1), -- Jan

(4, 2025, 1, 22, 18, 4), -- Jan

(5, 2025, 1, 22, 22, 0), -- Jan

(1, 2025, 2, 20, 18, 2), -- Feb

(2, 2025, 2, 20, 20, 0), -- Feb

(3, 2025, 2, 20, 19, 1), -- Feb

(4, 2025, 2, 20, 17, 3), -- Feb

(5, 2025, 2, 20, 20, 0); -- Feb

Queries

UPDATE students

SET profile\_image = 'upload/students/boy.jpg'

WHERE student\_id = 1;