**TABLES**

create table Student (

stud\_id decimal(12) primary key not null,

first\_name varchar(32),

last\_name varchar(32),

group\_id decimal(12) references Group1(group\_id),

birth\_date date,

email varchar(32),

is\_on\_scolarship decimal(12));

create table Group1 (

group\_id decimal(12) primary key not null,

group\_name varchar(32),

year decimal(12),

faculty\_id decimal(12) references Faculty(faculty\_id));

create table Faculty (

faculty\_id decimal(12) primary key not null,

faculty\_name varchar(32));

create table Subject (

subject\_id decimal(12) primary key not null,

subject\_name varchar(32),

credits decimal(12));

create table Classroom (

classroom\_id decimal(12) primary key not null,

floor decimal(12),

is\_lecture\_hall varchar(32));

create table Teacher (

teacher\_id decimal(12) primary key not null,

first\_name varchar(32),

last\_name varchar(32),

email varchar(32),

faculty\_id decimal(12) references Faculty(faculty\_id));

create table Lesson (

lesson\_id decimal(12) primary key not null,

subject\_id decimal(12) references Subject(subject\_id),

group\_id decimal(12) references Group1(group\_id),

time varchar(32),

day\_of\_week decimal(12),

classroom\_id decimal(12) references Classroom(classroom\_id),

teacher\_id decimal(12) references Teacher(teacher\_id));

**ALTER TABLES**

Alter table Student drop column stud\_id;

Alter table Student add column stud\_id;

ALTER TABLE Student alter stud\_id set NOTNULL;

Alter table Student add primary key stud\_id;

Alter table Student rename to Students;

**INSERTS**

insert into faculty (faculty\_id, faculty\_name) values ( 1,’software engeneering’);

insert into faculty (faculty\_id, faculty\_name) values ( 2,’historical sciences’);

insert into faculty (faculty\_id, faculty\_name) values ( 3,’information and communication’);

insert into faculty (faculty\_id, faculty\_name) values ( 4,’languages’);

insert into faculty (faculty\_id, faculty\_name) values ( 5,’literature’);

insert into faculty (faculty\_id, faculty\_name) values ( 6,’cyber security’);

insert into faculty (faculty\_id, faculty\_name) values ( 7,’computer science’);

insert into faculty (faculty\_id, faculty\_name) values ( 8,’marketing’);

insert into faculty (faculty\_id, faculty\_name) values ( 9,’Operations and Decision Systems’);

insert into faculty (faculty\_id, faculty\_name) values ( 10,’accountancy’)

insert into Group1 (group\_id, group\_name, year, faculty\_id) values ( 101,’SE-2016’, 2020, 1);

insert into Group1 (group\_id, group\_name, year, faculty\_id) values ( 102,’SE-2017’, 2020, 2);

insert into Group1 (group\_id, group\_name, year, faculty\_id) values ( 103,’CS-2001’, 2017, 3);

insert into Group1 (group\_id, group\_name, year, faculty\_id) values ( 104,’CS-2003’, 2017, 4);

insert into Group1 (group\_id, group\_name, year, faculty\_id) values ( 105,’IT-2014’, 2018, 5);

insert into Group1 (group\_id, group\_name, year, faculty\_id) values ( 106,’IT-2006’, 2018, 6);

insert into Group1 (group\_id, group\_name, year, faculty\_id) values ( 107,’MKT-2008’, 2019, 7);

insert into Group1 (group\_id, group\_name, year, faculty\_id) values ( 108,’MKT-2009’, 2019, 8);

insert into Group1 (group\_id, group\_name, year, faculty\_id) values ( 109,’LG-2004’, 2017, 9);

insert into Group1 (group\_id, group\_name, year, faculty\_id) values ( 110,’ODS-2023’, 2020, 10)

insert into Student (stud\_id , first\_name, last\_name, group\_id , birth\_date , email, is\_on\_scolarship ) values (11, ‘Umeko’, ‘Schroder’, 101, ‘04/12/2002’, ‘uschroder0@skype.com’, 26000);

insert into Student (stud\_id , first\_name, last\_name, group\_id , birth\_date , email, is\_on\_scolarship ) values (12, ‘Garold’, ‘Vondrak’, 102, ‘04/10/2001’, ‘gvondrak1@marriott.com’, 26000);

insert into Student (stud\_id , first\_name, last\_name, group\_id , birth\_date , email, is\_on\_scolarship ) values (13, ‘Chaim’, ‘Muspratt’, 103, ‘02/04/2003’, ‘cmuspratt2@amazonaws.com’, 26000);

insert into Student (stud\_id , first\_name, last\_name, group\_id , birth\_date , email, is\_on\_scolarship ) values (14, ‘Lexy’, ‘Hulbert’, 104, ‘07/02/2001’, ‘lhulbert3@netscape.com’, 26000);

insert into Student (stud\_id , first\_name, last\_name, group\_id , birth\_date , email, is\_on\_scolarship ) values (15, ‘Kenny’, ‘O’’Griffin’, 105, ‘25/09/2001’, ‘kogriffin4@admin.ch’, 26000);

insert into Student (stud\_id , first\_name, last\_name, group\_id , birth\_date , email, is\_on\_scolarship ) values (16, ‘Ailey’, ‘Rennard’, 106, ‘05/06/2002’, ‘arennard5@wisc.edu’, 26000);

insert into Student (stud\_id , first\_name, last\_name, group\_id , birth\_date , email, is\_on\_scolarship ) values (17, ‘Melodie’, ‘Spoerl’, 107, ‘27/01/2000’, ‘mspoerl6@bloomberg.com’, 26000);

insert into Student (stud\_id , first\_name, last\_name, group\_id , birth\_date , email, is\_on\_scolarship ) values (18, ‘Mata’, ‘Dodle’, 108, ‘17/08/2002’, ‘mdodle7@msu.edu’, 26000);

insert into Student (stud\_id , first\_name, last\_name, group\_id , birth\_date , email, is\_on\_scolarship ) values (19, ‘Lauritz’, ‘Belshaw’, 109, ‘09/12/2003’, ‘lbelshaw8@github.com’, 26000);

insert into Student (stud\_id , first\_name, last\_name, group\_id , birth\_date , email, is\_on\_scolarship ) values (20, ‘Jone’, ‘Josefson’, 110, ‘15/08/2001’, ‘jjosefson9@mit.edu’, 26000);

insert into Classroom (classroom\_id, floor, is\_lecture\_hall) values ( 31, 3,’yes’);

insert into Classroom (classroom\_id, floor, is\_lecture\_hall) values ( 32, 4,’no’);

insert into Classroom (classroom\_id, floor, is\_lecture\_hall) values ( 33, 2,’no’);

insert into Classroom (classroom\_id, floor, is\_lecture\_hall) values ( 34, 1,’yes’);

insert into Classroom (classroom\_id, floor, is\_lecture\_hall) values ( 35, 5,’no’);

insert into Classroom (classroom\_id, floor, is\_lecture\_hall) values ( 36, 4,’yes’);

insert into Classroom (classroom\_id, floor, is\_lecture\_hall) values ( 37, 3,’no’);

insert into Classroom (classroom\_id, floor, is\_lecture\_hall) values ( 38, 3,’no’);

insert into Classroom (classroom\_id, floor, is\_lecture\_hall) values ( 39, 1,’yes’);

insert into Classroom (classroom\_id, floor, is\_lecture\_hall) values ( 40, 2,’no’);

insert into Teacher (teacher\_id , first\_name, last\_name, email, faculty\_id ) values (41, ‘Jennilee’, ‘Chaffyn’, ‘jchaffyn0@ning.com’, 1);

insert into Teacher (teacher\_id , first\_name, last\_name, email, faculty\_id ) values (42, ‘Danielle’, ‘Bulfoot’, ‘dbulfoot1@cisco.com’, 2);

insert into Teacher (teacher\_id , first\_name, last\_name, email, faculty\_id ) values (43, ‘Drusilla’, ‘Waggett’, ‘dwaggett2@vinaora.com’, 3);

insert into Teacher (teacher\_id , first\_name, last\_name, email, faculty\_id ) values (44, ‘Rebeca’, ‘Laugharne’, ‘rlaugharne3@histats.com’, 4);

insert into Teacher (teacher\_id , first\_name, last\_name, email, faculty\_id ) values (45, ‘Tressa’, ‘Demer’, ‘tdemer4@cdc.gov’, 5);

insert into Teacher (teacher\_id , first\_name, last\_name, email, faculty\_id ) values (46, ‘Lavina’, ‘Fromont’, ‘lfromont5@tamu.edu’, 6);

insert into Teacher (teacher\_id , first\_name, last\_name, email, faculty\_id ) values (47, ‘Fletch’, ‘Treversh’, ‘ftreversh6@usda.gov’, 7);

insert into Teacher (teacher\_id , first\_name, last\_name, email, faculty\_id ) values (48, ‘Perl’, ‘Forber’, ‘pforber7@xing.com’, 8);

insert into Teacher (teacher\_id , first\_name, last\_name, email, faculty\_id ) values (49, ‘Orsola’, ‘Danielsohn’, ‘odanielsohn8@taobao.com’, 9);

insert into Teacher (teacher\_id , first\_name, last\_name, email, faculty\_id ) values (50, ‘Leone’, ‘Olczak’, ‘lolczak9@economist.com’, 10);

insert into Lesson (lesson\_id, subject\_id, group\_id , time, day\_of\_week, classroom\_id, teacher\_id) values (51, 21, 101, ‘8.30’,1, 31, 41);

insert into Lesson (lesson\_id, subject\_id, group\_id , time, day\_of\_week, classroom\_id, teacher\_id) values (52, 22, 102, ‘9.20’,2, 32, 42);

insert into Lesson (lesson\_id, subject\_id, group\_id , time, day\_of\_week, classroom\_id, teacher\_id) values (53, 23, 103, ‘10.10’,3, 33, 43);

insert into Lesson (lesson\_id, subject\_id, group\_id , time, day\_of\_week, classroom\_id, teacher\_id) values (54, 24, 104, ‘11.10’,4, 34, 44);

insert into Lesson (lesson\_id, subject\_id, group\_id , time, day\_of\_week, classroom\_id, teacher\_id) values (55, 25, 105, ‘12.00’,5, 35, 45);

insert into Lesson (lesson\_id, subject\_id, group\_id , time, day\_of\_week, classroom\_id, teacher\_id) values (56, 26, 106, ‘13.30’,6, 36, 46);

insert into Lesson (lesson\_id, subject\_id, group\_id , time, day\_of\_week, classroom\_id, teacher\_id) values (57, 27, 107, ‘14.10’,7, 37, 47);

insert into Lesson (lesson\_id, subject\_id, group\_id , time, day\_of\_week, classroom\_id, teacher\_id) values (58, 28, 108, ‘15.00’,1, 38, 48);

insert into Lesson (lesson\_id, subject\_id, group\_id , time, day\_of\_week, classroom\_id, teacher\_id) values (59, 29, 109, ‘15.50’,2, 39, 49);

insert into Lesson (lesson\_id, subject\_id, group\_id , time, day\_of\_week, classroom\_id, teacher\_id) values (60, 30, 110, ‘16.40’,3, 40, 50);

**UPDATE AND DELETE**

UPDATE Group1 SET group\_name='Zhandostyn gruppasy' WHERE group\_id = 103;

DELETE FROM Group1 Where group\_id = 104;

UPDATE Student SET first\_name='Mark' WHERE group\_id = 13;

DELETE FROM Student Where Student\_id = 14;

UPDATE faculty SET faculty\_name='english language' WHERE faculty\_id = 4;

DELETE FROM faculty Where faculty\_id = 3;

UPDATE Classroom SET floor=2 WHERE classroom\_id = 34;

DELETE FROM Classroom Where classroom\_id = 35;

UPDATE Teacher SET last\_name='Jang' WHERE teacher\_id = 43;

DELETE FROM Teacher Where teacher\_id = 14;

UPDATE Lesson SET time='9.10' WHERE lesson\_id = 52;

DELETE FROM Lesson Where lesson\_id = 53;

**QUERIES**

SELECT stud\_id, first\_name, last\_name FROM Student WHERE birth\_date BETWEEN 2003.12.03 AND 2001.11.01;

SELECT group\_id, group\_name FROM Group1 WHERE faculty\_id = 5;

SELECT MAX(Credits) FROM Subject;

SELECT MIN(Floor), classroom\_id FROM Classroom

SELECT AVG(Birth\_date) FROM Student WHERE Birth\_date > 10/10/2002;

SELECT COUNT(lesson\_id) FROM Lesson WHERE classroom\_id = 7;

SELECT Group\_id, stud\_id, group\_name, first\_name, last\_name FROM Group INNER JOIN Student ON Student.group\_id=Group.group\_id;

SELECT lesson\_id, time, subject\_name FROM Lesson RIGHT JOIN Subject ON Lesson.subject\_id=Subject.subject\_id;

SELECT lesson\_id l, floor, classroom\_id, teacher\_id FROM Lesson LEFT JOIN Classroom ON Classroom.clasroom\_id=Lesson.classroom\_id;

SELECT email, is\_on\_scholarship, first\_name, last\_name, group\_name FROM Student FULL OUTER JOIN Group ON Student.group\_id=Group.group\_id;