**Bus System DB**



**Tables**

create table student(

student\_id number(10) not null primary key,

s\_Fname varchar(10),

s\_Mname varchar(10),

s\_Lname varchar(10),

s\_city varchar(15),

s\_postcode number(6),

s\_street varchar(35),

s\_block\_number number(4),

student\_uni varchar(20),

s\_PhNumber number(10)

);

create table Bus(

bus\_number number(3) not null primary key,

license\_plate varchar(8)

);

create table driver(

driver\_id number(10) not null primary key,

d\_Fname varchar(10),

d\_Mname varchar(10),

d\_Lname varchar(10),

work\_time varchar(15),

d\_city varchar(15),

d\_postcode number(6),

d\_street varchar(35),

d\_block\_number number(4),

d\_PhNumber number(10)

);

create table bus\_destination(

destination\_number NUMBER (3) GENERATED ALWAYS AS IDENTITY (

START WITH 1

INCREMENT BY 1

MAXVALUE 200),

bus\_number number(3) not null ,

driver\_id number(10) not null ,

work\_time varchar(15) ,

b\_city varchar(15),

s\_postcode number(6) not null ,

b\_street varchar(35),

b\_block\_number number(4),

uni varchar(20),

CONSTRAINT PK\_bus PRIMARY KEY(destination\_number),

CONSTRAINT FK\_Dbus FOREIGN KEY (bus\_number)REFERENCES bus ( bus\_number),

CONSTRAINT FK\_DdriverFOREIGN KEY (driver\_id)REFERENCES driver(driver\_id)

);

create table administrator(

admin\_id number(3) not null ,

a\_Fname varchar(10),

a\_Mname varchar(10),

a\_Lname varchar(10),

work\_time varchar(15),

a\_PhNumber number(10),

CONSTRAINT PK\_Admin PRIMARY KEY (admin\_id)

);

create table access\_control(

admin\_id number(3) not null ,

destination\_number number(3) not null ,

student\_id number(10) not null ,

CONSTRAINT PK\_Cadmin PRIMARY KEY (admin\_id,destination\_number,student\_id),

CONSTRAINT FK\_Cbus FOREIGN KEY (destination\_number)REFERENCES bus\_destination( destination\_number),

CONSTRAINT FK\_Cstudent FOREIGN KEY (student\_id)REFERENCES student(student\_id)

);

**Insertion**

/\*student insertion\*/

INSERT INTO student (student\_id, s\_Fname, s\_Mname, s\_Lname, s\_city, s\_postcode, s\_street, s\_block\_number, student\_uni, s\_PhNumber)

VALUES (1234567890, 'Soha', 'Ahmed', 'Al-zahrani', 'Jeddah', 100010, 'Tahlia', 55, 'Jeddah University', 0506543832);

INSERT INTO student (student\_id, s\_Fname, s\_Mname, s\_Lname, s\_city, s\_postcode, s\_street, s\_block\_number, student\_uni, s\_PhNumber)

VALUES (1234567891, 'Mona', 'Khaled', 'Al-qahtani', 'Jeddah', 100510, 'Tahlia', 95, 'Jeddah University', 0576543832);

INSERT INTO student (student\_id, s\_Fname, s\_Mname, s\_Lname, s\_city, s\_postcode, s\_street, s\_block\_number, student\_uni, s\_PhNumber)

VALUES (1234567892, 'Amal', 'Yazeed','Aqeel', 'Jeddah', 100019, 'Al-khalidiya', 11, 'Jeddah University', 0506543892);

INSERT INTO student (student\_id, s\_Fname, s\_Mname, s\_Lname, s\_city, s\_postcode, s\_street, s\_block\_number, student\_uni, s\_PhNumber)

VALUES (1234567893, 'Mona', 'Basm', 'Al-qahtani', 'Jeddah', 100015, 'Al-nahdah', 38, 'Jeddah University', 0576543032);

INSERT INTO student (student\_id, s\_Fname, s\_Mname, s\_Lname, s\_city, s\_postcode, s\_street, s\_block\_number, student\_uni, s\_PhNumber)

VALUES (1234567894, 'Nada', 'Ahmed', 'Al-zahrani', 'Jeddah', 120010, 'Abdullah bin Al-Abbas', 009, 'Jeddah University', 0506043832);

INSERT INTO student (student\_id, s\_Fname, s\_Mname, s\_Lname, s\_city, s\_postcode, s\_street, s\_block\_number, student\_uni, s\_PhNumber)

VALUES (1234567895, 'Sara', 'Amin', 'Al-harbi', 'Makkah', 120510, 'Abdullah bin Al-Abbas', 43, 'KAU', 0576593832);

INSERT INTO student (student\_id, s\_Fname, s\_Mname, s\_Lname, s\_city, s\_postcode, s\_street, s\_block\_number, student\_uni, s\_PhNumber)

VALUES (1234567896, 'Farah', 'Malik','Al-ahmari', 'Makkah', 120019, 'Dr Abdul qadir koshak', 20, 'KAU', 0508543892);

INSERT INTO student (student\_id, s\_Fname, s\_Mname, s\_Lname, s\_city, s\_postcode, s\_street, s\_block\_number, student\_uni, s\_PhNumber)

VALUES (1234567897, 'Wafa', 'Anwar', 'Al-juhani', 'Makkah', 120015, 'Al-Laith', 19, 'KAU', 0536543032);

/\*bus insertion\*/

iNSERT INTO Bus (bus\_number, license\_plate)

VALUES (101, 'ABC1234');

INSERT INTO Bus (bus\_number, license\_plate)

VALUES (102, 'DEF5678');

iNSERT INTO Bus (bus\_number, license\_plate)

VALUES (100, 'BHY1234');

INSERT INTO Bus (bus\_number, license\_plate)

VALUES (103, 'DTR5678');

/\*driver insertion\*/

INSERT INTO driver (driver\_id, d\_Fname, d\_Mname, d\_Lname, work\_time, d\_city, d\_postcode, d\_street, d\_block\_number, d\_PhNumber)

VALUES (9076543210, 'Owais','Farid','Alqahtani', 'Morning Shift', 'Jeddah', 90730, 'Hawshab Ibn Yazid', 15, 0573457890);

INSERT INTO driver (driver\_id, d\_Fname, d\_Mname, work\_time, d\_city, d\_postcode, d\_street, d\_block\_number, d\_PhNumber)

VALUES (6765432109, 'Malik','Bilal','Afternoon Shift', 'Jeddah', 64691, 'Tahlia', 07, 0596543220);

INSERT INTO driver (driver\_id, d\_Fname, d\_Mname, d\_Lname, work\_time, d\_city, d\_postcode, d\_street, d\_block\_number, d\_PhNumber)

VALUES (3876543210, 'Mussab','Ahmeed','Tawfiq', 'Morning Shift', 'Makkah', 88210, 'Al-insaniah', 39, 0534117890);

INSERT INTO driver (driver\_id, d\_Fname, d\_Mname, work\_time, d\_city, d\_postcode, d\_street, d\_block\_number, d\_PhNumber)

VALUES (1265432109, 'Raed','Bassam', 'Afternoon Shift', 'Makkah', 67701, 'Al-bashara', 86, 0506543210);

/\*Makkah bus destination \*/

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (100, 3876543210, 'Morning Shift', 'Makkah',120510, 'Abdullah bin Al-Abbas', 43, 'KAU');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (100, 3876543210, 'Morning Shift', 'Makkah',120019, 'Dr Abdul qadir koshak', 20, 'KAU');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (100, 3876543210, 'Morning Shift', 'Makkah', 120015, 'Al-Laith', 19, 'KAU');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (101, 1265432109, 'Afternoon Shift', 'Makkah',120510, 'Abdullah bin Al-Abbas', 43, 'KAU');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (101, 1265432109, 'Afternoon Shift', 'Makkah',120019, 'Dr Abdul qadir koshak', 20, 'KAU');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (101, 1265432109, 'Afternoon Shift', 'Makkah', 120015, 'Al-Laith', 19, 'KAU');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (102, 9076543210, 'Morning Shift', 'Jeddah',120010, 'Abdullah bin Al-Abbas', 009, 'Jeddah University');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (102, 9076543210, 'Morning Shift', 'Jeddah',100015, 'Al-nahdah', 38, 'Jeddah University');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (102, 9076543210, 'Morning Shift', 'Jeddah', 100010, 'Tahlia', 55, 'Jeddah University');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (102, 9076543210, 'Morning Shift', 'Jeddah',100019, 'Al-khalidiya', 11, 'Jeddah University');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (102, 9076543210, 'Morning Shift', 'Jeddah',100510, 'Tahlia', 95, 'Jeddah University');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (103, 6765432109, 'Afternoon Shift', 'Jeddah',120010, 'Abdullah bin Al-Abbas', 009, 'Jeddah University');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (103, 6765432109, 'Afternoon Shift', 'Jeddah',100015, 'Al-nahdah', 38, 'Jeddah University');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (103, 6765432109, 'Afternoon Shift', 'Jeddah', 100010, 'Tahlia', 55, 'Jeddah University');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (103, 6765432109, 'Afternoon Shift', 'Jeddah',100019, 'Al-khalidiya', 11, 'Jeddah University');

INSERT INTO bus\_destination (bus\_number, driver\_id, work\_time, b\_city, s\_postcode, b\_street, b\_block\_number, uni)

VALUES (103, 6765432109, 'Afternoon Shift', 'Jeddah',100510, 'Tahlia', 95, 'Jeddah University');

/\*administrator insertion\*/

INSERT INTO administrator (admin\_id, a\_Fname, a\_Mname, work\_time, a\_PhNumber)

VALUES (200, 'Amin', 'Ahmed', 'Morning Shift', 0550006543);

INSERT INTO administrator (admin\_id, a\_Fname, a\_Mname, work\_time, a\_PhNumber)

VALUES (201, 'Adham', 'Salim', 'Afternoon Shift', 0550076543);

INSERT INTO administrator (admin\_id, a\_Fname, a\_Mname, work\_time, a\_PhNumber)

VALUES (202, 'Mohammed', 'Ibrahim', 'Afternoon Shift', 0550506543);

INSERT INTO administrator (admin\_id, a\_Fname, a\_Mname,a\_Lname, work\_time, a\_PhNumber)

VALUES (203, 'Omar', 'Seead', 'Bawazir','Morning Shift', 0553226543);

/\*access\_control insertion\*/

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (201, 5, 1234567896);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (201, 6, 1234567897);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (200, 2, 1234567896);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (200, 1, 1234567895);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (200, 3, 1234567897);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (201, 4, 1234567895);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (203, 7, 1234567894);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (203, 8, 1234567893);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (203, 9, 1234567890);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (203, 10, 1234567892 );

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (203, 11, 1234567891);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (202, 12, 1234567894);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (202, 13, 1234567893);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (202, 14, 1234567890);

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (202, 15, 1234567892 );

INSERT INTO access\_control (admin\_id, DESTINATION\_NUMBER, student\_id)

VALUES (202, 16, 1234567891);