*SQL of creation relations (DDL):*

CREATE DATABASE DAYESDA;

CREATE TABLE organization

( oid     CHAR(50)     NOT NULL,

    orgname    VARCHAR(100) NOT NULL,

Sector     VARCHAR(25)   NOT NULL,

Location   VARCHAR(50) NOT NULL,

Phone    INT NOT NULL,

password   CHAR(6)       NOT NULL,

    PRIMARY KEY (oid));

CREATE TABLE trainee

(     tid     CHAR(50)    NOT NULL,

tfname     VARCHAR(25)  NOT NULL,

tlname     VARCHAR(25)  NOT NULL,

Phone    INT NOT NULL,

password   CHAR(6)      NOT NULL,

    PRIMARY KEY (tid) );

CREATE TABLE service

(    sid     CHAR(5)        NOT NULL,

    sname     VARCHAR(50)   NOT NULL,

sdescription VARCHAR(255)NOT NULL,

    PRIMARY KEY (sid) );

CREATE TABLE employee

(     eid     CHAR(10)     NOT NULL,

fname     VARCHAR(25)   NOT NULL,

lname     VARCHAR(25)   NOT NULL,

salary    INT   CHECK(Salary<=25000),

jobtitle  ENUM('CEO','Manager','Instructor','planner','evaluator'),

address   VARCHAR(50) NOT NULL,

Phone    INT NOT NULL,

password  CHAR(6)       NOT NULL,

    PRIMARY KEY (eid));

CREATE TABLE PAYMENT

(    cardnumber  CHAR(16)     NOT NULL,

    type     VARCHAR(100) NOT NULL,

address    VARCHAR(100) NOT NULL,

PRIMARY KEY (cardnumber));

CREATE TABLE request

(    reqnumber    INT     NOT NULL AUTO\_INCREMENT,

    date         DATE       NOT NULL,

    price     NUMERIC(7,2),

sid     CHAR(5)   NOT NULL,

oid     CHAR(50)   NOT NULL,

    PRIMARY KEY (reqnumber),

    FOREIGN KEY (sid) REFERENCES service(sid),

FOREIGN KEY (oid) REFERENCES organization(oid)ON UPDATE CASCADE);

CREATE TABLE course

(    crid     CHAR(10)     NOT NULL,

    crname     VARCHAR(100) NOT NULL,

cdescription VARCHAR(255)NOT NULL,

    duration    INT    NOT NULL CHECK(duration>0),

tuition     INT NOT NULL,

eid     CHAR(10) NOT NULL,

    PRIMARY KEY (crid),

FOREIGN KEY (eid) REFERENCES employee(eid) ON UPDATE CASCADE);

CREATE TABLE completion

(    yearofcom   INT     NOT NULL,

    crid     CHAR(10)    NOT NULL,

tid     CHAR(50)    NOT NULL,

cardnumber  CHAR(16)    NOT NULL,

grade     CHAR(5) DEFAULT 'INC',

    PRIMARY KEY (yearofcom,tid,crid),

    FOREIGN KEY (crid) REFERENCES course(crid),

    FOREIGN KEY (tid) REFERENCES trainee(tid)ON UPDATE CASCADE,

FOREIGN KEY (cardnumber) REFERENCES payment(cardnumber)ON UPDATE CASCADE);

CREATE TABLE isassignedto

(    eid     CHAR(10)    NOT NULL,

reqnumber   INT     NOT NULL,

    PRIMARY KEY (reqnumber, eid),

    FOREIGN KEY (reqnumber) REFERENCES request(reqnumber)ON UPDATE CASCADE,

    FOREIGN KEY (eid) REFERENCES employee(eid)ON UPDATE CASCADE );

*SQL of population relations:*

INSERT INTO service VALUES ('EM','EmergencyManagement','Providing consultation, recommendation and suggestions to emergency related activities that help organizations be better prepared and respond properly to incidents is our profession.');

INSERT INTO service VALUES ('EOP','Emergency operation plan',' Develop and revise Emergency Operation Plans for organizations');

INSERT INTO service VALUES ('BCP','Business continuity plans','Develop and revise Business continuity plans for organizations');

INSERT INTO service VALUES ('COOP','Continuous of operation plan','Develop plan to be able to work for 30 days through the incident and in the aftermath of the incident.');

INSERT INTO service VALUES ('IPP','Infrastructure protection planning','Identify the critical infrastructure in the organization and provide a plan to protect them');

INSERT INTO service VALUES ('DRP','Disaster response planning','provide knowledge, personnel and plans to be able to respond adequately and effectively');

INSERT INTO service VALUES ('HMP','Hazard mitigation planning',' Identify ways to reduce an impact of hazards and prepare for disaster within them.');

INSERT INTO service VALUES ('HRP','Hazard recovery planning','Provide plans to help organization to recover as soon as possible in the aftermath of incidents.');

INSERT INTO service VALUES ('PP','Preparedness planning',' Prepare organization to face disaster and major incidents if happened.');

INSERT INTO service VALUES ('HVAP','Hazard Vulnerabilities Assessment planning',' identify the most organization vulnerabilities by conducting a very detailed and solid assessment done by an experts.');

INSERT INTO service VALUES ('THRAP','Threat and Hazard Risk Assessment planning','Discover the threats and the vulnerabilities that organization prone to.');

INSERT INTO service VALUES ('EDMP','Exercises and drills management planning','Develop and deliver exercises and drills to organization to test and find gaps in emergency management system.');

INSERT INTO service VALUES ('WISA','Walk in security assessment','Conduct an external and internal security assessment to identify security breach.');

INSERT INTO service VALUES ('IR','IncidentResponse','Ateam will be available to the organization in case of a disaster or a major incident.');

INSERT INTO service VALUES ('EDME','Exercises and drills management evaluation','Conduct evaluation of the current exercises and drills to test and find gaps in emergency management system.');

INSERT INTO service VALUES ('IPE','Infrastructure protection evaluation','Conduct evaluation of the current infrastructure protection plan and give feedback about it.');

INSERT INTO service VALUES ('DRE','Disaster response evaluation', 'Conduct evaluation of the current infrastructure protection plan and give feedback about it.');

INSERT INTO service VALUES ('HME','Hazard mitigation evaluation', 'Conduct evaluation of the current Hazard Mitigation plan and give feedback about it.');

INSERT INTO service VALUES ('HRE','Hazard recovery evaluation', 'Conduct evaluation of the current recovery plan and give feedback about it.');

INSERT INTO service VALUES ('DA','Damage Assesment', 'Conduct Assesment of the current Damage that happen to the organization.');

INSERT INTO employee VALUES ('e1','Amer','Atta',25000,'CEO','484 Alrabwah st.','552634568','e11111');

INSERT INTO employee VALUES ('e2','Ahmad','Aldayes',20000, 'Manager','498 Aljazerah st.','546638922','e22222');

INSERT INTO employee VALUES ('e3','saeed','naif',18000, 'Manager','444 Alrawdahm nighborhood.','562337565','e33333');

INSERT INTO employee VALUES ('e4','Hadi','Omar',18000, 'Manager',' 456 safa st.','543228760','e44444');

INSERT INTO employee VALUES ('e5','Rashed','Rakan',6000, 'Instructor','116 alOtheem rd.','557554561','e55555');

INSERT INTO employee VALUES ('e6','Khaled','Ali',9000, 'Instructor','344 Alhuda st.','557336563','e66666');

INSERT INTO employee VALUES ('e7','Mohammed','Zaid',7500, 'Instructor','701 Riyadh st.','543339596','e77777');

INSERT INTO employee VALUES ('e8','Wael','Salman',10000, 'Instructor','683 Alfaiha st.','542344006','e88888');

INSERT INTO employee VALUES ('e9','Fadi','Hadi',8000, 'Instructor','232 south Riyadh rd.','567774666','e99999');

INSERT INTO employee VALUES ('e10','Ibraheem','Fahad',9000, 'Instructor','333 Aleskan st.','553884555','e10101');

INSERT INTO employee VALUES ('e11','jawad','fadil',7000, 'planner','145 Alsalem st.','540002300','e11011');

INSERT INTO employee VALUES ('e12','Abdularahman','Adel',6000, 'planner','185 Alhamra st.','567443200','e12121');

INSERT INTO employee VALUES ('e13','AbdulAzizaeed','Omar',9000, 'planner','111 Naseem niehborhood.','567882911','e13131');

INSERT INTO employee VALUES ('e14','Martin','Foster',15000, 'planner','233 Khrees st.','557778922','e14141');

INSERT INTO employee VALUES ('e15','Smith','William',10000, 'planner','988 king Khaled st.','559553599','e15151');

INSERT INTO employee VALUES ('e16','Waleed','Azim',10000, 'evaluator','898 Almezan st.','552552500','e16161');

INSERT INTO employee VALUES ('e17','Mohanned','Khalaf',8000, 'evaluator','690 Fadelah st.','553553533','e17171');

INSERT INTO employee VALUES ('e18','Alaa','alshareef',9500, 'evaluator','555 Rahman st.','556656556','e18181');

INSERT INTO employee VALUES ('e19','Majed','Faleh',7000, 'evaluator','999 Nakheel st.','557778377','e19191');

INSERT INTO employee VALUES ('e20','Maher','jameel',10000, 'evaluator','666 Alrashed st.','544334244','e20202');

INSERT INTO course VALUES ('CERT','community emergency response team', ' Teach you to be a responder who can help in disaster situation and major incidents when first responders are overwhelmed.',10,3000,'e5');

INSERT INTO course VALUES ('DLS','Disaster life support','Teach you to be a supporter who can help in disaster situation and major incidents.',8,2500,'e5');

INSERT INTO course VALUES ('PIO','Public information officer', 'Prepare you to face challenges when you speak with media and others about the organization status and respond during a disaster.',10,4000,'e6');

INSERT INTO course VALUES ('DRIA','Disaster rapid Initial Assessment', 'Learn how to bring chaotic situation to an order and a system that help in responding to the incident in a systematic manner.',5,2000, 'e7');

INSERT INTO course VALUES ('CTP','Counter terrorism Procedures', 'Introduce you to the latest procedures plan to counter terrorism. ',1,1000,'e7');

INSERT INTO course VALUES ('ICS300','Incident command system 300', 'Teach you how to handle a disaster using the ICS as a tool.',2,2500,'e8');

INSERT INTO course VALUES ('ICS400', 'Incident command system 400', ' Teach you how to manage incident between states and large counties. ',2,2500,'e8');

INSERT INTO course VALUES ('PFCD','Planning for children in disaster', 'Equip you with appropriate skill, knowledge that help you deal with such vulnerable population (children).',1,1500, 'e9');

INSERT INTO course VALUES ('F1','Fema F1','IEMC/Community specific',1,2000,'e6');

INSERT INTO course VALUES ('F2','Fema F2','Introduction to Hazardous Materials.',1,2000,'e6');

INSERT INTO course VALUES ('F3','Fema F3','Household Hazardous materials.',1,2000,'e6');

INSERT INTO course VALUES ('F4','Fema F4','Intorduction to Exercise.',1,2000,'e10');

INSERT INTO course VALUES ('F5','Fema F5','Mitigation for Tribal Goverments.',1,2000,'e10');

INSERT INTO course VALUES ('F6','Fema F6','Excersise Evaluation and Improvement Planning',1,2000,'e10');

INSERT INTO course VALUES ('F7','Fema F7','Form used for development of the incident action plan',1,2000,'e10');

INSERT INTO course VALUES ('F8','Fema F8','Preparing for mass causality incidents.',1,2000,'e5');

INSERT INTO course VALUES ('F9','Fema F9','Continutity of operation Awarness.',1,2000,'e6');

INSERT INTO course VALUES ('F10', 'Fema F10','Introduction of operation Awarness.',1,2000,'e7');

INSERT INTO course VALUES ('F11','Fema F11','Public work and disaster recovery.',1,2000,'e8');

INSERT INTO course VALUES ('F12', 'Fema F12','Damage evaluation after incidents.',1,2000,'e10');

INSERT INTO ORGANIZATION VALUES ('Red Crescent','Saudi Red Crescent Authority','Public','25 Alrawabi rd.','0552634566','o11111');

INSERT INTO ORGANIZATION VALUES ('CivilDefense',' Saudi Civil Defense','Public','16 Alezdehar st.','0546638912','o22222');

INSERT INTO ORGANIZATION VALUES ('SaudiHEART',' Saudi Humanitarian Emergency Aid and Response ','Public','48 Alrawdahm nighborhood.','0562337665','o33333');

INSERT INTO ORGANIZATION VALUES ('Internal Ministry',' Saudi Internal Ministry','Public','45 Alsafa st.','0543628860','o44444');

INSERT INTO ORGANIZATION VALUES ('Haj Ministry',' Saudi Haj Ministry','public','16 alHada rd.','0555554561','o55555');

INSERT INTO ORGANIZATION VALUES ('Health Ministry',' Saudi Health Ministry','Public','34 Aldoha st.','0557336577','o66666');

INSERT INTO ORGANIZATION VALUES ('Energy and Water',' Saudi Energy and Water Ministry','Public','70 Riyadh st.','0543339996','o77777');

INSERT INTO ORGANIZATION VALUES ('Alhabeeb','AlHabeeb Hospital','Private','68 Alfaiha st.','0542345000','o88888');

INSERT INTO ORGANIZATION VALUES ('AlAlmani','Al-Almani Hospital','Private','23 West Riyadh rd.','0567374766','o99999');

INSERT INTO ORGANIZATION VALUES ('Aldawaeah','Aldawaeah medicine factory','Private','18 South circle st.','0553884855','o10101');

INSERT INTO ORGANIZATION VALUES ('Aveeno','Aveeno medicine factory','Private','14 Alsalem st.','0540022300','011011');

INSERT INTO ORGANIZATION VALUES ('Farmco','Farmco medicine factory','Private','15 Alhamra st.','0567443277','o12121');

INSERT INTO ORGANIZATION VALUES ('Alrabee','Alrabee factory','Private','111 Naseem rd.','0567882911','o13131');

INSERT INTO ORGANIZATION VALUES ('ABT','Alseraj Brothers Technology','Private','33 Khrees st.','0556668922', 'o14141');

INSERT INTO ORGANIZATION VALUES ('Ajmal','Ajmal perfumes','Private','98 king Khaled st.','0559223599','o15151');

INSERT INTO ORGANIZATION VALUES ('AlrwadSchool',' Alrwad School','Private','89 Almezan st.','0552552599','o16161');

INSERT INTO ORGANIZATION VALUES ('BaraemSchool',' Baraem School','Private','69 Fadelah st.','0553553522','o17171');

INSERT INTO ORGANIZATION VALUES ('SultanCollage',' prince Sultan Collage','Private','55 Rahman st.','0546656556','o18181');

INSERT INTO ORGANIZATION VALUES ('IbnSeena','Ibn Seena Collage','Private','99 Nakheel st.','0558878377', 'o19191');

INSERT INTO ORGANIZATION VALUES ('AlNoor',' AlNoor Institute','Private','66 Alrashed st.','0555334244','o20202');

INSERT INTO trainee VALUES('t1', 'Binta', 'Sanyang', 123456789, '123456');

INSERT INTO trainee VALUES('t2', 'James', 'Gomez', 123456789, '245678');

INSERT INTO trainee VALUES('t3', 'Dave', 'Bergner', 123456789, '123056');

INSERT INTO trainee VALUES('t4', 'Brian', 'Scelzo', 123456789, '123656');

INSERT INTO trainee VALUES('t5', 'Marie', 'Linder', 123456789, '623456');

INSERT INTO trainee VALUES('t6', 'Esther', 'Bentum', 123456789, '233456');

INSERT INTO trainee VALUES('t7', 'Titus', 'Codjoe', 123456789, '883456');

INSERT INTO trainee VALUES('t8', 'Gifty', 'Codjoe', 123409789, '103456');

INSERT INTO trainee VALUES('t9', 'Angel', 'Blessings', 1289456789, '100456');

INSERT INTO trainee VALUES('t10', 'Eli', 'Nuki', 123456789, '333456');

INSERT INTO trainee VALUES('t11', 'George', 'Bass', 123906789, '673456');

INSERT INTO trainee VALUES('t12', 'John', 'Jones', 123456789, '129056');

INSERT INTO trainee VALUES('t13', 'Taylor', 'Smith', 123566789, '123896');

INSERT INTO trainee VALUES('t14', 'Zack', 'Efron', 123008789, '120956');

INSERT INTO trainee VALUES('t15', 'Kandi', 'Burrus', 127866789, '000456');

INSERT INTO trainee VALUES('t16', 'Towanda', 'Jackson', 512456789, '111156');

INSERT INTO trainee VALUES('t17', 'Simon', 'King', 123409689, '190876');

INSERT INTO trainee VALUES('t18', 'Peter', 'Mendy', 128976789, '189056');

INSERT INTO trainee VALUES('t19', 'Peter', 'Bass', 123098789, '167856');

INSERT INTO trainee VALUES('t20', 'Jacob', 'Lowe', 123006789, '187956');

INSERT INTO payment VALUES('2345678900001111', 'VISA', 'Sanyang rd');

INSERT INTO payment VALUES('3456789090001111', 'MASTER', 'Gomez');

INSERT INTO payment VALUES('5467890340001111', 'VISA', 'Bergner str');

INSERT INTO payment VALUES('0098765430001111', 'VISA', 'Scelzo rd');

INSERT INTO payment VALUES('8907614320001111', 'MASTER', 'Linder blvd');

INSERT INTO payment VALUES('0987654320001111', 'MASTER', 'Bentum way');

INSERT INTO payment VALUES('5678943210001111', 'VISA', 'Codjoe rd');

INSERT INTO payment VALUES('8917654320001111', 'VISA', 'Codjoe str');

INSERT INTO payment VALUES('0988890980001111', 'VISA', 'Blessings way');

INSERT INTO payment VALUES('0009998880001111', 'MASTER', 'Nuki way');

INSERT INTO payment VALUES('9998880000001111', 'MASTER', 'Bass blvd');

INSERT INTO payment VALUES('2223334560001111', 'MASTER', 'Jones rd');

INSERT INTO payment VALUES('7865556780001111', 'MASTER', 'Smith str');

INSERT INTO payment VALUES('9089999990001111', 'VISA', 'Efron blvd');

INSERT INTO payment VALUES('3334567890001111', 'MASTER', 'Burrus blvd');

INSERT INTO payment VALUES('9087909990001111', 'VISA', 'Jackson str');

INSERT INTO payment VALUES('8909999990001111', 'VISA', 'King str');

INSERT INTO payment VALUES('1345678900001111', 'MASTER', 'Mendy rd');

INSERT INTO payment VALUES('8907654320001111', 'MASTER', 'Bass rd');

INSERT INTO payment VALUES('6789098760001111', 'MASTER', 'Lowe str');

INSERT INTO completion VALUES ('2014','F1', 't1','2345678900001111', 'A');

INSERT INTO completion VALUES ('2013','F2', 't2','3456789090001111', 'A');

INSERT INTO completion VALUES ('2013','F3', 't3','5467890340001111', 'A');

INSERT INTO completion VALUES ('2014','F4', 't4','0098765430001111', 'A');

INSERT INTO completion VALUES ('2012','F5', 't5','8907614320001111', 'A');

INSERT INTO completion VALUES ('2016','F6', 't6','0987654320001111', 'A');

INSERT INTO completion VALUES ('2016','F7', 't7','5678943210001111', 'A');

INSERT INTO completion VALUES ('2010','F8', 't8','8917654320001111', 'A');

INSERT INTO completion VALUES ('2016','F9', 't9','0988890980001111', 'B');

INSERT INTO completion VALUES ('2014','F10','t10','0009998880001111', 'B');

INSERT INTO completion VALUES ('2014','CERT', 't11','9998880000001111', 'C');

INSERT INTO completion VALUES ('2014','DLS', 't12','2223334560001111', 'C');

INSERT INTO completion VALUES ('2014','PIO', 't13','7865556780001111', 'C');

INSERT INTO completion VALUES ('2014','CTP', 't14','9089999990001111', 'B');

INSERT INTO completion VALUES ('2014','DRIA', 't15','3334567890001111', 'C');

INSERT INTO completion VALUES ('2014','ICS300', 't16','9087909990001111', 'B');

INSERT INTO completion VALUES ('2014','ICS400', 't17','8909999990001111', 'B');

INSERT INTO completion VALUES ('2014','PFCD', 't18','1345678900001111', 'C');

INSERT INTO completion VALUES ('2016','F12', 't18','1345678900001111', 'A');

INSERT INTO completion VALUES ('2016','F3', 't18','1345678900001111', 'A');

INSERT INTO request (date, price, sid, oid)VALUES ('2013-06-01',123.50,'EM', 'Energy and Water');

INSERT INTO request(date, price, sid, oid) VALUES ('2015-02-23',189.50, 'EOP','Haj Ministry');

INSERT INTO request (date, price, sid, oid) VALUES ('2011-02-23',200.00, 'BCP', 'Health Ministry');

INSERT INTO request (date, price, sid, oid) VALUES ('2012-03-03',350.90, 'COOP','Internal Ministry');

INSERT INTO request (date, price, sid, oid) VALUES ('2000-01-01',900.25, 'IPP','ABT' );

INSERT INTO request (date, price, sid, oid) VALUES ('2010-01-01',800.90, 'DRP','Ajmal' );

INSERT INTO request (date, price, sid, oid) VALUES ('2008-08-05',350.00, 'HMP','AlAlmani' );

INSERT INTO request(date, price, sid, oid) VALUES ('2015-10-22',2.99, 'PP','Aldawaeah');

INSERT INTO request(date, price, sid, oid) VALUES ('2013-09-04',56.89, 'HVAP','Alhabeeb');

INSERT INTO request(date, price, sid, oid) VALUES ('2015-12-12',4000.99, 'THRAP','AlNoor');

INSERT INTO request(date, price, sid, oid) VALUES ('2016-05-05',900.99, 'EDMP','Alrabee');

INSERT INTO request(date, price, sid, oid) VALUES ('2016-06-26',234.00, 'WISA','AlrwadSchool');

INSERT INTO request(date, price, sid, oid) VALUES ('2016-08-11',456.00, 'IR','Aveeno');

INSERT INTO request(date, price, sid, oid) VALUES ('2011-11-01',678.79, 'EDME','BaraemSchool');

INSERT INTO request(date, price, sid, oid) VALUES ('2012-12-02',123.90, 'IPE','CivilDefense');

INSERT INTO request(date, price, sid, oid) VALUES ('2015-09-10',234.90, 'DRE','Farmco');

INSERT INTO request(date, price, sid, oid) VALUES ('2016-11-03',235.80, 'HME','IbnSeena');

INSERT INTO request(date, price, sid, oid) VALUES ('2016-01-30',90.99, 'HRE','Red Crescent');

INSERT INTO request(date, price, sid, oid) VALUES ('2016-02-09',80.99, 'HRP','SaudiHEART');

INSERT INTO request(date, price, sid, oid) VALUES ('2016-05-09',100.99, 'HRP','Alrabee');

INSERT INTO isassignedto VALUES ('e11',1);

INSERT INTO isassignedto VALUES ('e12',2);

INSERT INTO isassignedto VALUES ('e13',3);

INSERT INTO isassignedto VALUES ('e14',4);

INSERT INTO isassignedto VALUES ('e15',5);

INSERT INTO isassignedto VALUES ('e14',6);

INSERT INTO isassignedto VALUES ('e13',6);

INSERT INTO isassignedto VALUES ('e12',7);

INSERT INTO isassignedto VALUES ('e13',8);

INSERT INTO isassignedto VALUES ('e14',9);

INSERT INTO isassignedto VALUES ('e15',10);

INSERT INTO isassignedto VALUES ('e11',11);

INSERT INTO isassignedto VALUES ('e16',12);

INSERT INTO isassignedto VALUES ('e12',13);

INSERT INTO isassignedto VALUES ('e16',14);

INSERT INTO isassignedto VALUES ('e17',15);

INSERT INTO isassignedto VALUES ('e18',16);

INSERT INTO isassignedto VALUES ('e19',17);

INSERT INTO isassignedto VALUES ('e16',18);

INSERT INTO isassignedto VALUES ('e11',19);

INSERT INTO isassignedto VALUES ('e12',20);