

database.sql

```
CREATE DATABASE medical_insurance;  
USE medical_insurance;
```

```
CREATE TABLE customer  
(  
    id          INT NOT NULL auto_increment PRIMARY KEY,  
    f_name      VARCHAR(20) NOT NULL,  
    m_name      VARCHAR(20) NOT NULL,  
    l_name      VARCHAR(20) NOT NULL,  
    e_mail      VARCHAR(30) NOT NULL,  
    address     VARCHAR(50) NOT NULL,  
    b_date      DATE NOT NULL,  
    gender      VARCHAR(6) NOT NULL,  
    phone       CHAR(11) NOT NULL  
);
```

```
CREATE TABLE dependent  
(  
    cus_id      INT NOT NULL,  
    name        VARCHAR(20) NOT NULL,  
    b_date      DATE NOT NULL,  
    gender      VARCHAR(6) NOT NULL,  
    kinship     VARCHAR(20) NOT NULL,  
    FOREIGN KEY (cus_id) REFERENCES customer (id),  
    PRIMARY KEY (cus_id, name, kinship)  
);
```

```
CREATE TABLE hospital  
(  
    id          INT NOT NULL auto_increment PRIMARY KEY,  
    name        VARCHAR(20) NOT NULL,  
    address     VARCHAR(50) NOT NULL,  
    e_mail      VARCHAR(30) NOT NULL,  
    phone       CHAR(11) NOT NULL  
);
```

```
CREATE TABLE plan  
(  
    id          INT NOT NULL auto_increment PRIMARY KEY,  
    type        VARCHAR(20) UNIQUE NOT NULL,  
    benefits    TEXT NOT NULL,  
    price       DECIMAL(8, 2) NOT NULL  
);
```

```
CREATE TABLE enrolled  
(  
    hos_id      INT NOT NULL,  
    plan_id     INT NOT NULL,  
    FOREIGN KEY (hos_id) REFERENCES hospital (id),  
    FOREIGN KEY (plan_id) REFERENCES plan (id),  
    UNIQUE no_dup (hos_id, plan_id)  
);
```

```

CREATE TABLE contract
(
    id          INT NOT NULL auto_increment PRIMARY KEY,
    plan_id     INT NOT NULL,
    cus_id      INT DEFAULT NULL UNIQUE,
    res_id      INT DEFAULT NULL,
    dep_name    VARCHAR(20) DEFAULT NULL,
    kinship     VARCHAR(20) DEFAULT NULL,
    payment_method VARCHAR(20),
    FOREIGN KEY (cus_id) REFERENCES customer (id),
    FOREIGN KEY (res_id, dep_name, kinship) REFERENCES dependent (cus_id, name, kinship),
    FOREIGN KEY (plan_id) REFERENCES plan (id),
    UNIQUE res_id (res_id, dep_name, kinship),

    CHECK ((cus_id IS NOT NULL) OR ( res_id IS NOT NULL AND dep_name IS NOT NULL)),
    CHECK ((cus_id IS NULL AND res_id IS NOT NULL) OR (cus_id IS NOT NULL AND res_id IS NULL));

```

```

CREATE TABLE claim
(
    id          INT NOT NULL auto_increment PRIMARY KEY,
    con_id      INT NOT NULL,
    hos_id      INT NOT NULL,
    expenses    DECIMAL(10, 2) NOT NULL,
    expenses_subject TEXT NOT NULL,
    expenses_details TEXT NOT NULL,
    status      TINYINT DEFAULT NULL,
    f_date      DATE NOT NULL,
    FOREIGN KEY (con_id) REFERENCES contract (id),
    FOREIGN KEY (hos_id) REFERENCES hospital (id)
);

```

/*----- SAMPLE DATA -----*/

```

insert into customer values(DEFAULT, 'Hany', 'Ahmed', 'Mahmoud', 'Hany123@gmail.com');
insert into customer values(DEFAULT, 'Omar', 'Mohamed', 'Madgy', 'Omar123@gmail.com');
insert into customer values(DEFAULT, 'Hoda', 'Emad', 'Fawzy', 'Hoda123@gmail.com');
insert into customer values(DEFAULT, 'Noor', 'Naser', 'Mahmoud', 'Noor123@gmail.com');
insert into customer values(DEFAULT, 'Sara', 'Akram', 'Hassan', 'Sara123@gmail.com');
insert into customer values(DEFAULT, 'Hany', 'Yasser', 'Saad', 'Hany2123@gmail.com');
insert into customer values(DEFAULT, 'Mazen', 'Mostafa', 'Talaat', 'Mazen123@gmail.com');
insert into customer values(DEFAULT, 'Malek', 'Emad', 'Mandoor', 'Malek123@gmail.com');

```

```

insert into dependent values(1, 'Maria', '2000-03-15', 'female', 'daughter');
insert into dependent values(1, 'Magy', '2003-03-17', 'female', 'daughter');
insert into dependent values(2, 'rafat', '2008-11-01', 'male', 'son');
insert into dependent values(4, 'karim', '2005-03-11', 'male', 'son');
insert into dependent values(6, 'Maha', '2000-12-11', 'female', 'daughter');
insert into dependent values(6, 'yara', '2007-03-11', 'female', 'daughter');
insert into dependent values(6, 'Dina', '1975-03-11', 'female', 'wife');
insert into dependent values(7, 'ali', '2000-01-11', 'male', 'son');
insert into dependent values(7, 'Yousef', '2002-08-08', 'male', 'son');
insert into dependent values(7, 'Taher', '1997-03-11', 'male', 'son');

```

```
insert into dependent values(7,'Sahar','1977-03-11','female','wife');
```

```
insert into plan values (DEFAULT, 'Basic','5% coverage',6000.00);
insert into plan values (DEFAULT, 'Premium','15% coverage',10000.00);
insert into plan values (DEFAULT, 'Golden','30% coverage',15000.00);
```

```
insert into contract values (DEFAULT, 1, 1, null, null,null,'Cash, visa');
insert into contract values (DEFAULT, 3, 2, null, null,null,'Cash, visa');
insert into contract values (DEFAULT, 3, 3, null, null,null,'Master Card,cash')
insert into contract values (DEFAULT, 3, 4, null, null,null,'Master Card,cash')
insert into contract values (DEFAULT, 3, 5, null, null,null,'Master Card,cash')
insert into contract values (DEFAULT, 3, 6, null, null ,null,'Cash, visa');
insert into contract values (DEFAULT, 3, 7, null, null,null,'Cash, visa');
insert into contract values (DEFAULT, 3, 8, null, null,null,'Cash, visa');
```

```
insert into contract values (DEFAULT, 3, null, 1, 'Maria', 'daughter','Cash, vi
insert into contract values (DEFAULT, 2, null, 1, 'Magy', 'daughter','Cash, vis
insert into contract values (DEFAULT, 2, null, 2, 'rafat', 'son','Cash, visa');
insert into contract values (DEFAULT, 2, null, 4, 'karim', 'son','Cash, visa');
insert into contract values (DEFAULT, 2, null, 6, 'Maha', 'daughter','Cash, vis
insert into contract values (DEFAULT, 1, null, 6, 'yara', 'daughter','Cash, vis
insert into contract values (DEFAULT, 1, null, 6, 'Dina', 'wife','Cash, visa');
insert into contract values (DEFAULT, 1, null, 7, 'ali', 'son','Cash, visa');
insert into contract values (DEFAULT, 2, null, 7, 'Yousef', 'son','Cash, visa')
insert into contract values (DEFAULT, 3, null, 7, 'Taher', 'son','Cash, visa');
insert into contract values (DEFAULT, 3, null, 7, 'Sahar', 'wife','Cash, visa')
```

```
insert into hospital values (DEFAULT, 'Dar Elshefa','21 alfath street, tanta gc
insert into hospital values (DEFAULT, 'Abn sina','24 Hassan street, Ghardaka gc
insert into hospital values (DEFAULT, 'Celopatra','15 Foadalgendy street, tanta
insert into hospital values (DEFAULT, 'Al gama','16 altahreer square, cairo gov
insert into hospital values (DEFAULT, 'Alkinanah','11 nasr street, cairo goverr
insert into hospital values (DEFAULT, 'Tiba','13 alhelw street, tanta governor
insert into hospital values (DEFAULT, 'Alfyrooz','17 alahraam gardens, cairo gc
insert into hospital values (DEFAULT, 'Alamrican','18 Foad street, Alexandira',
insert into hospital values (DEFAULT, 'Alandalos','19 alimobarak street, tanta
insert into hospital values (DEFAULT, 'Almaidan','13 alnakheel street, Mansoura
```

```
insert into enrolled values (1, 1);
insert into enrolled values (3, 1);
insert into enrolled values (4, 1);
insert into enrolled values (9, 1);
insert into enrolled values (2, 2);
insert into enrolled values (4, 2);
insert into enrolled values (5, 2);
insert into enrolled values (8, 2);
insert into enrolled values (7, 2);
insert into enrolled values (9, 2);
insert into enrolled values (1, 3);
insert into enrolled values (2, 3);
```

```
insert into enrolled values (3, 3);
insert into enrolled values (4, 3);
insert into enrolled values (5, 3);
insert into enrolled values (6, 3);
insert into enrolled values (7, 3);
insert into enrolled values (8, 3);
insert into enrolled values (9, 3);
insert into enrolled values (10, 3);
```

```
insert into claim values (DEFAULT, 1, 1, 2000, 'broken hand','covering 100% of
insert into claim values (DEFAULT, 1, 1, 500 , 'fever','covering 100% of the ex
insert into claim values (DEFAULT, 1, 2, 200 , 'flu','covering 100% of the expe
insert into claim values (DEFAULT, 2, 3, 300 , 'gastroenteritis','covering 100%
insert into claim values (DEFAULT, 2, 1, 290 , 'asthma','covering 100% of the e
insert into claim values (DEFAULT, 3, 3, 4000, 'broken leg','covering 100% of t
insert into claim values (DEFAULT, 4, 3, 500 , 'fever','covering 100% of the ex
insert into claim values (DEFAULT, 4, 2, 480 , 'chest pain','covering 100% of t
insert into claim values (DEFAULT, 6, 3, 780 , 'flu','covering 100% of the expe
insert into claim values (DEFAULT, 6, 3, 2300, 'broken leg','covering 100% of t
insert into claim values (DEFAULT, 10, 2, 2000, 'asthma','covering 100% of the
insert into claim values (DEFAULT, 5, 1, 700 , 'cold','covering 100% of the exp
insert into claim values (DEFAULT, 7, 3, 2000, 'chest pain','covering 100% of t
insert into claim values (DEFAULT, 8, 1, 250 , 'fever','covering 100% of the ex
insert into claim values (DEFAULT, 6, 3, 780 , 'flu','covering 100% of the expe
```

