



Concordia University

Engineering and Computer Science

CONCORDIA UNIVERSITY

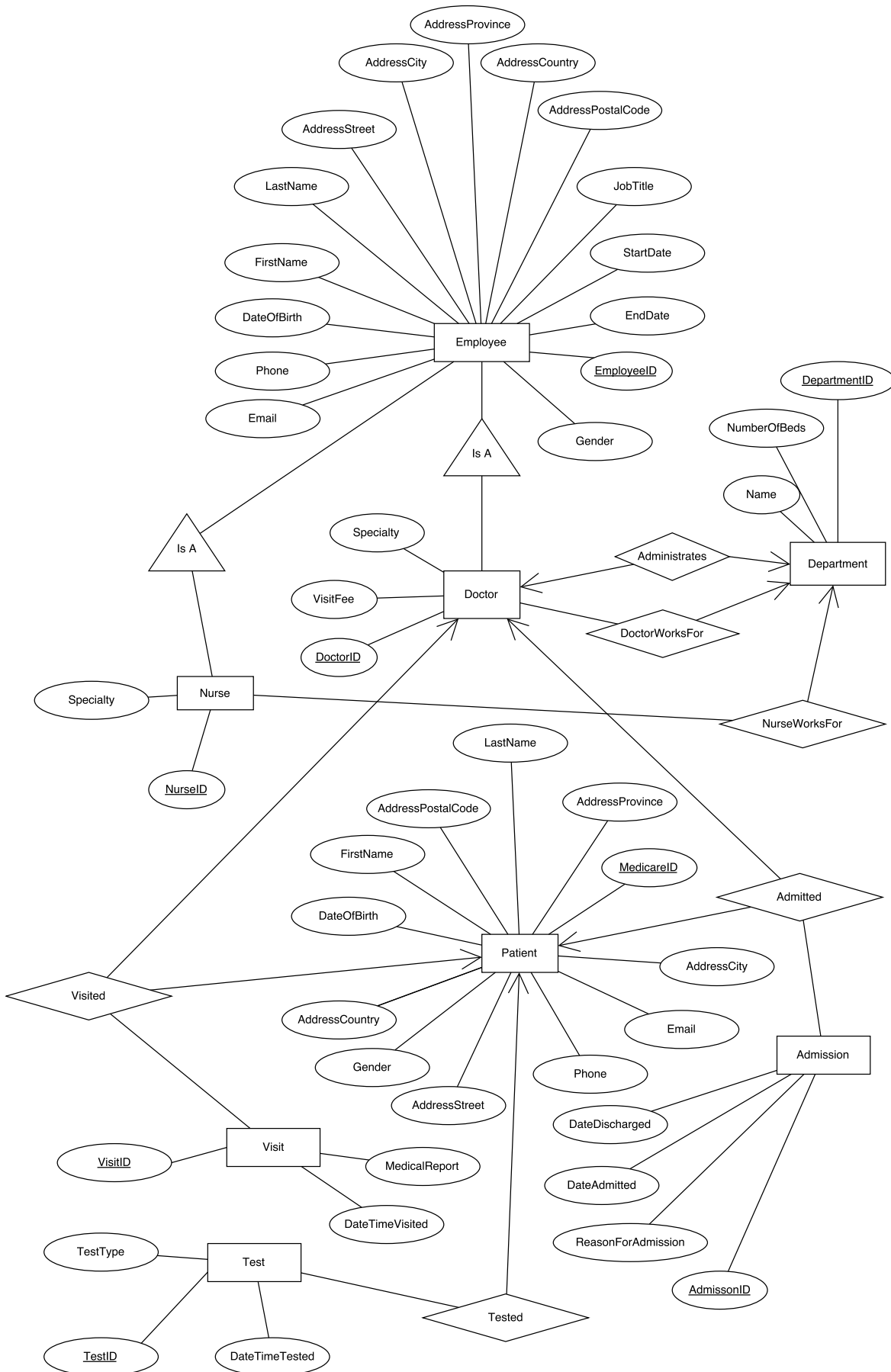
COMP353 - DATABASES

Warm-up Project: Hospital Information System

Submitted To:
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1 ER Model



2 Table Create and Insertion Script

```
CREATE TABLE Department(  
    DepartmentID INT NOT NULL AUTO_INCREMENT,  
    Name VARCHAR(255) NOT NULL,  
    /* NOTE: The following column will be made into a foreign  
    key AFTER the creation of all the Doctor entries below. */  
    AdministratorID INT NOT NULL,  
    NumberOfBeds INT,  
    PRIMARY KEY(DepartmentID)  
);  
  
CREATE TABLE Employee(  
    EmployeeID INT NOT NULL AUTO_INCREMENT,  
    FirstName VARCHAR(255) NOT NULL,  
    LastName VARCHAR(255) NOT NULL,  
    JobTitle VARCHAR(255),  
    StartDate DATE NOT NULL,  
    EndDate DATE,  
    Gender ENUM( 'Male' , 'Female' ),  
    DateOfBirth DATE,  
    Phone VARCHAR(20),  
    Email VARCHAR(127),  
    AddressStreet VARCHAR(255),  
    AddressCity VARCHAR(127),  
    AddressProvince VARCHAR(127),  
    AddressCountry VARCHAR(63),  
    AddressPostalCode VARCHAR(63),  
    PRIMARY KEY (EmployeeID)  
);  
  
CREATE TABLE Doctor(  
    EmployeeID INT NOT NULL,  
    DepartmentID INT NOT NULL,  
    Specialty VARCHAR(255),  
    VisitFee FLOAT NOT NULL,  
    PRIMARY KEY (EmployeeID),  
    FOREIGN KEY (EmployeeID)  
    REFERENCES Employee(EmployeeID),  
    FOREIGN KEY (DepartmentID)  
    REFERENCES Department(DepartmentID)  
);  
  
CREATE TABLE Nurse(  
    EmployeeID INT NOT NULL,
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    DepartmentID INT NOT NULL,
    Specialty VARCHAR(255),
    PRIMARY KEY (EmployeeID),
    FOREIGN KEY (EmployeeID)
    REFERENCES Employee (EmployeeID),
    FOREIGN KEY (DepartmentID)
    REFERENCES Department (DepartmentID)
);

CREATE TABLE Patient (
    MedicareID INT NOT NULL,
    FirstName VARCHAR(255),
    LastName VARCHAR(255),
    Gender ENUM( 'Male', 'Female' ),
    DateOfBirth DATE,
    Phone VARCHAR(20),
    AddressStreet VARCHAR(255),
    AddressCity VARCHAR(127),
    AddressProvince VARCHAR(127),
    AddressCountry VARCHAR(63),
    AddressPostalCode VARCHAR(63),
    PRIMARY KEY (MedicareID)
);

CREATE TABLE Admission (
    AdmissionID INT NOT NULL AUTO_INCREMENT,
    MedicareID INT NOT NULL,
    AssignedDoctorID INT NOT NULL,
    ReasonForAdmission VARCHAR(255),
    DateAdmitted DATE NOT NULL,
    DateDischarged DATE,
    PRIMARY KEY (AdmissionID),
    FOREIGN KEY (MedicareID)
    REFERENCES Patient (MedicareID),
    FOREIGN KEY (AssignedDoctorID)
    REFERENCES Doctor (EmployeeID)
);

CREATE TABLE Visit (
    VisitID INT NOT NULL AUTO_INCREMENT,
    MedicareID INT NOT NULL,
    DoctorID INT NOT NULL,
    DateTimeVisited DATETIME NOT NULL,
    MedicalReport VARCHAR(255),
    PRIMARY KEY (VisitID),

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FOREIGN KEY (MedicareID)
REFERENCES Patient (MedicareID),
FOREIGN KEY (DoctorID)
REFERENCES Doctor (EmployeeID)
);

```

```

CREATE TABLE Test (
    TestID INT NOT NULL AUTO-INCREMENT,
    MedicareID INT NOT NULL,
    TestType VARCHAR(127),
    DateTimeTested DATETIME,
    PRIMARY KEY (TestID),
    FOREIGN KEY (MedicareID)
REFERENCES Patient (MedicareID)
);

```

```

INSERT INTO Department (Name, AdministratorID, NumberOfBeds)
VALUES ('Neurology', 1, 21);

INSERT INTO Department (Name, AdministratorID, NumberOfBeds)
VALUES ('Radiology', 2, 16);

INSERT INTO Department (Name, AdministratorID, NumberOfBeds)
VALUES ('Oncology', 3, 34);

INSERT INTO Department (Name, AdministratorID, NumberOfBeds)
VALUES ('Dermatology', 4, 8);

/* Doctor Definitions
NOTE: ADD ONLY Doctors HERE,
CREATING THE Employee FIRST, THEN THE Doctor */

INSERT INTO Employee (FirstName, LastName, JobTitle, StartDate, EndDate,
    Gender, DateOfBirth, Phone, Email, AddressStreet,
    AddressCity, AddressProvince, AddressCountry, AddressPostalCode)
VALUES ('Nick', 'Jonas', 'Doctor', '2011-05-14', NULL, 'Male', '1980-09-09',
    '5144463425', 'jonie34@we.com', '567_Fire_Street', 'Windsor', 'Ontario',
    'Canada', 'H5E3G5');

INSERT INTO Doctor (EmployeeID, DepartmentID, Specialty, VisitFee)
VALUES (1, 1, 'Neurology', 98.97);

INSERT INTO Employee (FirstName, LastName, JobTitle, StartDate, EndDate,
    Gender, DateOfBirth, Phone, Email, AddressStreet,
    AddressCity, AddressProvince, AddressCountry, AddressPostalCode)
VALUES ('Tom', 'Tomson', 'Doctor', '2012-07-24', NULL, 'Male', '1959-06-30',
    '5148594104', 'myparentswerentverycreative@gmail.com',
    '3245_Cranberry_Lane', 'Hamilton', 'Ontario', 'Canada', 'H9G3K5');

INSERT INTO Doctor (EmployeeID, DepartmentID, Specialty, VisitFee)
VALUES (2, 2, 'Radiology', 150.00);

INSERT INTO Employee (FirstName, LastName, JobTitle, StartDate, EndDate,
    Gender, DateOfBirth, Phone, Email, AddressStreet,
    AddressCity, AddressProvince, AddressCountry, AddressPostalCode)
VALUES ('Jack', 'Layton', 'Doctor', '1971-12-01', '2011-08-22', 'Male', '1950-07-18',
    '5194555555', 'stopemailingmeimdead@canada.gov.ca', '52000_Ottawa_Road',
    'Ottawa', 'Ontario', 'Canada', 'A6H2H3');

INSERT INTO Doctor (EmployeeID, DepartmentID, Specialty, VisitFee)
VALUES (3, 3, 'Oncology', 205.95);

INSERT INTO Employee (FirstName, LastName, JobTitle, StartDate, EndDate,
    Gender, DateOfBirth, Phone, Email, AddressStreet,
    AddressCity, AddressProvince, AddressCountry, AddressPostalCode)
VALUES ('Jean', 'Chretien', 'Doctor', '2003-12-12', NULL, 'Male', '1934-01-11',
    '4505552342', 'crisse@tabarnac.qc.ca', '420_Rue_de_Maisonneuve',
    'Laval', 'Quebec', 'Canada', 'G1F6H6');

INSERT INTO Doctor (EmployeeID, DepartmentID, Specialty, VisitFee)
VALUES (4, 4, 'Dermatology', 150.00);

/* WARNING!!! DO NOT MOVE THIS STATEMENT
THIS HAS TO BE DONE HERE BECAUSE Doctor AND Department DEPEND ON EACH OTHER! */
ALTER TABLE Department
ADD FOREIGN KEY (AdministratorID)
REFERENCES Doctor (EmployeeID);

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/* Nurse Definitions */

INSERT INTO Employee(FirstName, LastName, JobTitle, StartDate, EndDate,
    Gender, DateOfBirth, Phone, Email, AddressStreet,
    AddressCity, AddressProvince, AddressCountry, AddressPostalCode)
VALUES ('Tina', 'Thui', 'Nurse', '2011-02-14', NULL, 'Female', '1975-09-09',
    '5149384756', 'thui@we.com', '567-Firewall-Street', 'Toronto', 'Ontario',
    'Canada', 'H5E3G6');

INSERT INTO Nurse(EmployeeID, DepartmentID, Specialty)
VALUES (5, 1, 'Neurology');

INSERT INTO Employee(FirstName, LastName, JobTitle, StartDate, EndDate,
    Gender, DateOfBirth, Phone, Email, AddressStreet,
    AddressCity, AddressProvince, AddressCountry, AddressPostalCode)
VALUES ('Joseph', 'Stallman', 'Nurse', '2010-05-17', NULL, 'Male', '1983-10-01',
    '5194252255', 'breadlines@ussr.com', '1313-Somewhere-Street',
    'Toronto', 'Ontario', 'Canada', 'H5E4G5');

INSERT INTO Nurse(EmployeeID, DepartmentID, Specialty)
VALUES (6, 2, 'Radiology');

INSERT INTO Employee(FirstName, LastName, JobTitle, StartDate, EndDate,
    Gender, DateOfBirth, Phone, Email, AddressStreet,
    AddressCity, AddressProvince, AddressCountry, AddressPostalCode)
VALUES ('Grace', 'Kelly', 'Nurse', '2015-02-11', NULL, 'Female', '1995-02-12',
    '5193847312', 'princessprettypants@hellokittyisland.com',
    '12134-Whatever-Avenue', 'Ottawa', 'Ontario', 'Canada', 'L2F2K4');

INSERT INTO Nurse(EmployeeID, DepartmentID, Specialty)
VALUES (7, 3, 'Oncology');

INSERT INTO Employee(FirstName, LastName, JobTitle, StartDate, EndDate,
    Gender, DateOfBirth, Phone, Email, AddressStreet,
    AddressCity, AddressProvince, AddressCountry, AddressPostalCode)
VALUES ('Maybellene', 'MacDonald', 'Nurse', '2001-09-11', NULL, 'Female', '1975-09-09',
    '5144141455', 'neverforget@hotmail.com', '767-Hot-Drive',
    'Montreal', 'Quebec', 'Canada', 'H7H6K6');

INSERT INTO Nurse(EmployeeID, DepartmentID, Specialty)
VALUES (8, 4, 'Dermatology');

/* General Employee Definitions */

INSERT INTO Employee(FirstName, LastName, JobTitle, StartDate, EndDate,
    Gender, DateOfBirth, Phone, Email, AddressStreet,
    AddressCity, AddressProvince, AddressCountry, AddressPostalCode)
VALUES ('Joe', 'Dirt', 'Janitor', '1990-12-24', NULL, 'Male', '1975-09-09',
    '5196532456', 'therealjohnncena69@hotmail.com', '12-Campus-Road',
    'Sudbury', 'Ontario', 'Canada', 'J3J2K2');

INSERT INTO Employee(FirstName, LastName, JobTitle, StartDate, EndDate,
    Gender, DateOfBirth, Phone, Email, AddressStreet,
    AddressCity, AddressProvince, AddressCountry, AddressPostalCode)
VALUES ('Ricky', 'Rickles', 'Janitor_and-Naturopath', '2016-12-01', '2016-12-02',
    'Male', '1975-09-09', '5553561749', 'rugdealer@hotmail.com', '158-Bonneview',
    'Sunnyvale', 'Nova-Scotia', 'Canada', 'K2D9G9');

/* Patient Definitions */

INSERT INTO Patient(MedicareID, FirstName, LastName, Gender,
    DateOfBirth, Phone, AddressStreet, AddressCity,
    AddressProvince, AddressCountry, AddressPostalCode)
VALUES (2345164, 'Don', 'John', 'Male', '1976-04-14', '5149384756',
    '456-Firewall-Street', 'Toronto', 'Ontario', 'Canada', 'H5E3G6');

INSERT INTO Patient(MedicareID, FirstName, LastName, Gender,
    DateOfBirth, Phone, AddressStreet, AddressCity,
    AddressProvince, AddressCountry, AddressPostalCode)
VALUES (3416725, 'Connor', 'MacBride', 'Male', '1911-12-04', '8155428849',
    '6500-Oldtown-Road', 'Vancouver', 'British-Columbia', 'Canada', 'H4J7S1');

INSERT INTO Patient(MedicareID, FirstName, LastName, Gender,
    DateOfBirth, Phone, AddressStreet, AddressCity,
    AddressProvince, AddressCountry, AddressPostalCode)
VALUES (5332134, 'Sally', 'Sambers', 'Female', '1959-11-11', '8298167586',
    '7421-Tarnation-Street', 'Yellowknife', 'Yukon', 'Canada', 'J2D2S3');

INSERT INTO Patient(MedicareID, FirstName, LastName, Gender,
    DateOfBirth, Phone, AddressStreet, AddressCity,
    AddressProvince, AddressCountry, AddressPostalCode)
VALUES (5206820, 'John', 'Johnson', 'Male', '1956-01-22', '9913977247',
    '6868-Summerdale-Avenue', 'Val-David', 'Quebec', 'Canada', 'L3A1D1');

INSERT INTO Patient(MedicareID, FirstName, LastName, Gender,
    DateOfBirth, Phone, AddressStreet, AddressCity,
    AddressProvince, AddressCountry, AddressPostalCode)
VALUES (1048166, 'Ron', 'Burgundy', 'Male', '1964-07-14', '5398316009',
    '5890-Baxter-Street', 'San-Diego', 'California', 'Freedom-Land', 'J5A6F8');

INSERT INTO Patient(MedicareID, FirstName, LastName, Gender,
    DateOfBirth, Phone, AddressStreet, AddressCity,

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        AddressProvince, AddressCountry, AddressPostalCode)
VALUES (1245163, 'Randall', 'Flagg', 'Male', '1967-08-01', '1489531928',
        '1538-Walking-Lane', 'Halifax', 'Nova-Scotia', 'Canada', 'A7G3D6');

INSERT INTO Patient (MedicareID, FirstName, LastName, Gender,
        DateOfBirth, Phone, AddressStreet, AddressCity,
        AddressProvince, AddressCountry, AddressPostalCode)
VALUES (2706410, 'Olga', 'Ludwig', 'Female', '1902-10-05', '2457561062',
        '5097-Harvard-Avenue', 'Montreal', 'Quebec', 'Canada', 'A3H7F9');

INSERT INTO Patient (MedicareID, FirstName, LastName, Gender,
        DateOfBirth, Phone, AddressStreet, AddressCity,
        AddressProvince, AddressCountry, AddressPostalCode)
VALUES (1521083, 'Carl', 'Brutananadilewski', 'Male', '1906-07-11', '7281899533',
        '2287-It-Dont-Matter-Street', 'Calgary', 'Alberta', 'Canada', 'H7A7G7');

INSERT INTO Patient (MedicareID, FirstName, LastName, Gender,
        DateOfBirth, Phone, AddressStreet, AddressCity,
        AddressProvince, AddressCountry, AddressPostalCode)
VALUES (1034148, 'Roberto', 'Francesco', 'Male', '1981-03-11', '7046102153',
        '1548-Salsa-Street', 'Surrey', 'British-Columbia', 'Canada', 'H7A4G9');

INSERT INTO Patient (MedicareID, FirstName, LastName, Gender,
        DateOfBirth, Phone, AddressStreet, AddressCity,
        AddressProvince, AddressCountry, AddressPostalCode)
VALUES (1090156, 'Mike', 'Huntshteencks', 'Male', '1943-05-22', '8017383877',
        '3788-Bush-Road', 'Edmonton', 'Alberta', 'Canada', 'H0A8J8');

INSERT INTO Patient (MedicareID, FirstName, LastName, Gender,
        DateOfBirth, Phone, AddressStreet, AddressCity,
        AddressProvince, AddressCountry, AddressPostalCode)
VALUES (7088083, 'Ivan', 'Ivanovitch-Ivanovsky', 'Male', '1947-09-15', '4335529948',
        '6224-Tracksuit-Street', 'Montreal', 'Quebec', 'Canada', 'J3A8N6');

INSERT INTO Patient (MedicareID, FirstName, LastName, Gender,
        DateOfBirth, Phone, AddressStreet, AddressCity,
        AddressProvince, AddressCountry, AddressPostalCode)
VALUES (3421685, 'Trevor', 'Tremolo', 'Male', '1918-11-05', '8098282279',
        '798-Country-Road', 'Kingston', 'Ontario', 'Canada', 'H9A1H8');

INSERT INTO Patient (MedicareID, FirstName, LastName, Gender,
        DateOfBirth, Phone, AddressStreet, AddressCity,
        AddressProvince, AddressCountry, AddressPostalCode)
VALUES (3592679, 'Francine', 'Fluffybuns', 'Female', '1911-01-11', '3816429356',
        '6362-Tree-Avenue', 'Rigaud', 'Quebec', 'Canada', 'H6A8G5');

INSERT INTO Patient (MedicareID, FirstName, LastName, Gender,
        DateOfBirth, Phone, AddressStreet, AddressCity,
        AddressProvince, AddressCountry, AddressPostalCode)
VALUES (2492277, 'Greg', 'Gustofferson', 'Male', '1968-06-11', '6252359181',
        '6869-Nowhere-Road', 'Whatever-Town', 'Nunavut', 'Canada', 'H3A0F0');

INSERT INTO Patient (MedicareID, FirstName, LastName, Gender,
        DateOfBirth, Phone, AddressStreet, AddressCity,
        AddressProvince, AddressCountry, AddressPostalCode)
VALUES (8997693, 'Nina', 'Fortner', 'Female', '1993-07-16', '9052194552',
        '2368-Fountain-Lake-Road', 'Owen-Sound', 'Ontario', 'Canada', 'A9D6G9');

/* Admission Definitions */

INSERT INTO Admission (MedicareID, AssignedDoctorID, ReasonForAdmission,
        DateAdmitted, DateDischarged)
VALUES (2345164, 1, 'Face-Hurt', '2011-01-11', '2011-12-11');

INSERT INTO Admission (MedicareID, AssignedDoctorID, ReasonForAdmission,
        DateAdmitted, DateDischarged)
VALUES (3592679, 2, 'Back-Pain', '2012-02-12', '2012-12-12');

INSERT INTO Admission (MedicareID, AssignedDoctorID, ReasonForAdmission,
        DateAdmitted, DateDischarged)
VALUES (1034148, 2, 'Heart-Surgery', '2012-02-12', '2012-12-12');

INSERT INTO Admission (MedicareID, AssignedDoctorID, ReasonForAdmission,
        DateAdmitted, DateDischarged)
VALUES (1090156, 4, 'Bone-Spurs', '2014-04-14', '2014-12-14');

INSERT INTO Admission (MedicareID, AssignedDoctorID, ReasonForAdmission,
        DateAdmitted, DateDischarged)
VALUES (3592679, 4, 'Amorphous-Finger-Pain', '2014-04-14', '2014-12-14');

INSERT INTO Admission (MedicareID, AssignedDoctorID, ReasonForAdmission,
        DateAdmitted, DateDischarged)
VALUES (7088083, 1, 'Lightsaber-in-Rectum', '2011-01-11', '2011-12-11');

INSERT INTO Admission (MedicareID, AssignedDoctorID, ReasonForAdmission,
        DateAdmitted, DateDischarged)
VALUES (5332134, 3, 'Stubbed-Toe', '2013-03-13', '2013-12-13');

INSERT INTO Admission (MedicareID, AssignedDoctorID, ReasonForAdmission,
        DateAdmitted, DateDischarged)
VALUES (2706410, 3, 'Probably-Cancer', '2013-03-13', '2013-12-13');

INSERT INTO Admission (MedicareID, AssignedDoctorID, ReasonForAdmission,

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        DateAdmitted, DateDischarged)
VALUES (8997693, 3, 'LugNut_in_Windpipe', '2013-03-13', '2013-12-13');

INSERT INTO Admission(MedicareID, AssignedDoctorID, ReasonForAdmission,
        DateAdmitted, DateDischarged)
VALUES (7088083, 2, 'Piercing_Gone_Bad', '2012-02-12', '2012-12-12');

/* Visit Definitions */

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (2345164, 1, '2011-01-17_01:41:51', 'stuff1.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (3592679, 2, '2012-02-17_02:42:52', 'stuff2.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (1034148, 2, '2013-03-17_03:43:53', 'stuff3.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (7088083, 4, '2014-04-17_04:44:54', 'stuff4.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (3592679, 4, '2015-05-17_05:45:55', 'stuff5.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (1090156, 1, '2016-06-17_06:46:56', 'stuff6.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (5332134, 3, '2017-07-17_07:47:57', 'stuff7.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (7088083, 3, '2008-08-17_08:48:58', 'stuff8.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (8997693, 3, '2009-09-17_09:49:59', 'stuff9.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (7088083, 2, '2010-10-17_10:40:50', 'stuff10.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (2345164, 1, '2011-01-18_01:41:51', 'stuff11.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (3592679, 2, '2012-02-18_02:42:52', 'stuff12.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (1034148, 2, '2013-03-18_03:43:53', 'stuff13.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (7088083, 4, '2014-04-18_04:44:54', 'stuff14.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (3592679, 4, '2015-05-18_05:45:55', 'stuff15.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (7088083, 1, '2016-06-18_06:46:56', 'stuff16.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (5332134, 3, '2017-07-18_07:47:57', 'stuff17.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (5206820, 3, '2008-08-18_08:48:58', 'stuff18.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (8997693, 3, '2009-09-18_09:49:59', 'stuff19.pdf');

INSERT INTO Visit(MedicareID, DoctorID, DateTimeVisited, MedicalReport)
VALUES (07088083, 2, '2010-10-17_10:40:50', 'stuff10.pdf');

/* Test Definitions */

INSERT INTO Test(MedicareID, TestType, DateTimeTested)
VALUES (2345164, 'Blood', '2014-08-13_14:47:56');

INSERT INTO Test(MedicareID, TestType, DateTimeTested)
VALUES (5332134, 'Fecal', '2014-09-13_08:47:56');

INSERT INTO Test(MedicareID, TestType, DateTimeTested)
VALUES (2345164, 'Saliva', '2014-08-03_09:47:56');

INSERT INTO Test(MedicareID, TestType, DateTimeTested)
VALUES (8997693, 'Urine', '2014-08-23_11:47:56');

INSERT INTO Test(MedicareID, TestType, DateTimeTested)
VALUES (7088083, 'Blood', '2013-08-13_10:45:56');

```


3 Table Records Printout

DepartmentID	Name	AdministratorID	NumberOfBeds	TableName
1	Neurology	1	21	Department
2	Radiology	2	16	Department
3	Oncology	3	34	Department
4	Dermatology	4	8	Department

EmployeeID	FirstName	LastName	JobTitle	StartDate	EndDate	Gender	DateOfBirth	Phone	Email
1	Nick	Jonas	Doctor	2011-05-14	NULL	Male	1980-09-09	5144463425	jonie34@we.com
2	Tom	Tomson	Doctor	2012-07-24	NULL	Male	1959-06-30	5148594104	myparentswerentverycreative@gmail.com
3	Jack	Layton	Doctor	1971-12-01	2011-08-22	Male	1950-07-18	5194555555	stopmailingmeimdead@canada.gov.ca
4	Jean	Chrétien	Doctor	2003-12-12	NULL	Male	1934-01-11	4505552342	crisse@tabarnac.qc.ca
5	Tina	Thui	Nurse	2011-02-14	NULL	Female	1975-09-09	5149384756	thui@we.com
6	Joseph	Stallman	Nurse	2010-05-17	NULL	Male	1983-10-01	5194252255	breadlines@ussr.com
7	Grace	Kelly	Nurse	2015-02-11	NULL	Female	1995-02-12	5193847312	princessprettypants@hellokittyisland.com
8	Maybellene	MacDonald	Nurse	2001-09-11	NULL	Female	1975-09-09	5144141455	neverforget@hotmail.com
9	Joe	Dirt	Janitor	1990-12-24	NULL	Male	1975-09-09	5196532456	therealjohncena69@hotmail.com
10	Ricky	Rickles	Janitor and Naturopath	2016-12-01	2016-12-02	Male	1975-09-09	5553561749	rugdealer@hotmail.com

AddressStreet	AddressCity	AddressProvince	AddressCountry	AddressPostalCode	TableName
567 Fire Street	Windsor	Ontario	Canada	H5E3G5	Employee
3245 Cranberry Lane	Hamilton	Ontario	Canada	H9G3K5	Employee
52000 Ottawa Road	Ottawa	Ontario	Canada	A6H2H3	Employee
420 Rue de Maisonneuve	Laval	Québec	Canada	G1F6H6	Employee
567 Firewall Street	Toronto	Ontario	Canada	H5E3G6	Employee
1313 Somewhere Street	Toronto	Ontario	Canada	H5E4G5	Employee
12134 Whatever Avenue	Ottawa	Ontario	Canada	L2F2K4	Employee
767 Hot Drive	Montréal	Québec	Canada	H7H6K6	Employee
12 Crampus Road	Sudbury	Ontario	Canada	J3J2K2	Employee
158 Bonnevieu	Sunnyvale	Nova Scotia	Canada	K2D9G9	Employee

EmployeeID	DepartmentID	Specialty	VisitFee	TableName
1	1	Neurology	98.97	Doctor
2	2	Radiology	150	Doctor
3	3	Oncology	205.95	Doctor
4	4	Dermatology	150	Doctor

EmployeeID	DepartmentID	Specialty	TableName
5	1	Neurology	Nurse
6	2	Radiology	Nurse
7	3	Oncology	Nurse
8	4	Dermatology	Nurse

MedicareID	FirstName	LastName	Gender	DateOfBirth	Phone		
1034148	Roberto	Francesco	Male	1981-03-11	7046102153		
1048166	Ron	Burgundy	Male	1964-07-14	5398316009		
1090156	Mike	Huntshteencks	Male	1943-05-22	8017383877		
1245163	Randall	Flagg	Male	1967-08-01	1489531928		
1521083	Carl	Brutananadilewski	Male	1906-07-11	7281899533		
2345164	Don	John	Male	1976-04-14	5149384756		
2492277	Greg	Gustofferson	Male	1968-06-11	6252359181		
2706410	Olga	Ludwig	Female	1902-10-05	2457561062		
3416725	Connor	MacBride	Male	1911-12-04	8155428849		
3421685	Trevor	Tremolo	Male	1918-11-05	8098282279		
3592679	Francine	Fluffybuns	Female	1911-01-11	3816429356		
5206820	John	Johnson	Male	1956-01-22	9913977247		
5332134	Sally	Sambers	Female	1959-11-11	8298167586		
7088083	Ivan	Ivanovitch-Ivanovsk	Male	1947-09-15	4335529948		
8997693	Nina	Fortner	Female	1993-07-16	9052194552		
AddressStreet	AddressCity	AddressProvince	AddressCountry	AddressPostalCode	TableName		
1548 Salsa Street	Surrey	British Columbia	Canada	H7A4G9	Patient		
5890 Baxter Street	San Diego	California	Freedom Land	J5A6F8	Patient		
3788 Bush Road	Edmonton	Alberta	Canada	H0A8J8	Patient		
1538 Walking Lane	Halifax	Nova Scotia	Canada	A7G3D6	Patient		
2287 It Dont Matter Street	Calgary	Alberta	Canada	H7A7G7	Patient		
456 Firewall Street	Toronto	Ontario	Canada	H5E3G6	Patient		
6869 Nowhere Road	Whatever Town	Nunavut	Canada	H3A0F0	Patient		
5097 Harvard Avenue	Montréal	Québec	Canada	A3H7F9	Patient		
6500 Oldtown Road	Vancouver	British Columbia	Canada	H4J7S1	Patient		
798 Country Road	Kingston	Ontario	Canada	H9A1H8	Patient		
6362 Tree Avenue	Rigaud	Québec	Canada	H6A8G5	Patient		
6868 Summerdale Avenue	Val-David	Québec	Canada	L3A1D1	Patient		
7421 Tarnation Street	Yellowknife	Yukon	Canada	J2D2S3	Patient		
6224 Tracksuit Street	Montréal	Québec	Canada	J3A8N6	Patient		
2368 Fountain Lake Road	Owen Sound	Ontario	Canada	A9D6G9	Patient		

AdmissionID	MedicareID	AssignedDoctorID	ReasonForAdmission	DateAdmitted	DateDischarged	TableName
1	2345164	1	Face Hurt	2011-01-11	2011-12-11	Admission
2	3592679	2	Back Pain	2012-02-12	2012-12-12	Admission
3	1034148	2	Heart Surgery	2012-02-12	2012-12-12	Admission
4	1090156	4	Bone Spurs	2014-04-14	2014-12-14	Admission
5	3592679	4	Amorphous Finger Pain	2014-04-14	2014-12-14	Admission
6	7088083	1	Lightsaber in Rectum	2011-01-11	2011-12-11	Admission
7	5332134	3	Stubbed Toe	2013-03-13	2013-12-13	Admission
8	2706410	3	Probably Cancer	2013-03-13	2013-12-13	Admission
9	8997693	3	Lug Nut in Windpipe	2013-03-13	2013-12-13	Admission
10	7088083	2	Piercing Gone Bad	2012-02-12	2012-12-12	Admission

VisitID	MedicareID	DoctorID	DateTimeVisited	MedicalReport	TableName
1	2345164	1	2011-01-17 01:41:51	stuff1.pdf	Visit
2	3592679	2	2012-02-17 02:42:52	stuff2.pdf	Visit
3	1034148	2	2013-03-17 03:43:53	stuff3.pdf	Visit
4	7088083	4	2014-04-17 04:44:54	stuff4.pdf	Visit
5	3592679	4	2015-05-17 05:45:55	stuff5.pdf	Visit
6	1090156	1	2016-06-17 06:46:56	stuff6.pdf	Visit
7	5332134	3	2017-07-17 07:47:57	stuff7.pdf	Visit
8	7088083	3	2008-08-17 08:48:58	stuff8.pdf	Visit
9	8997693	3	2009-09-17 09:49:59	stuff9.pdf	Visit
10	7088083	2	2010-10-17 10:40:50	stuff0.pdf	Visit
11	2345164	1	2011-01-18 01:41:51	stuff11.pdf	Visit
12	3592679	2	2012-02-18 02:42:52	stuff12.pdf	Visit
13	1034148	2	2013-03-18 03:43:53	stuff13.pdf	Visit
14	7088083	4	2014-04-18 04:44:54	stuff14.pdf	Visit
15	3592679	4	2015-05-18 05:45:55	stuff15.pdf	Visit
16	7088083	1	2016-06-18 06:46:56	stuff16.pdf	Visit
17	5332134	3	2017-07-18 07:47:57	stuff17.pdf	Visit
18	5206820	3	2008-08-18 08:48:58	stuff18.pdf	Visit
19	8997693	3	2009-09-18 09:49:59	stuff19.pdf	Visit
20	7088083	2	2010-10-17 10:40:50	stuff10.pdf	Visit

TestID	MedicareID	TestType	DateTimeTested	TableName
1	2345164	Blood	2014-08-13 14:47:56	Test
2	5332134	Fecal	2014-09-13 08:47:56	Test
3	2345164	Saliva	2014-08-03 09:47:56	Test
4	8997693	Urine	2014-08-23 11:47:56	Test
5	7088083	Blood	2013-08-13 10:45:56	Test

4 Queries and Results

4.1 Give detail of all nurses who are currently working.

```
select Employee.*, DepartmentID, Specialty
      from Employee
      join Nurse on Nurse.EmployeeID = Employee.EmployeeID
      where EndDate is null
```

EmployeeID	FirstName	LastName	JobTitle	StartDate	EndDate	Gender	DateOfBirth	Phone
5	Tina	Thui	Nurse	2011-02-14	NULL	Female	1975-09-09	5149384756
6	Joseph	Stallman	Nurse	2010-05-17	NULL	Male	1983-10-01	5194252255
7	Grace	Kelly	Nurse	2015-02-11	NULL	Female	1995-02-12	5193847312
8	Maybellene	MacDonald	Nurse	2001-09-11	NULL	Female	1975-09-09	5144141455

Email	AddressStreet	AddressCity	AddressProvince	AddressCountry	AddressPostalCode	DepartmentID	Specialty
thui@we.com	567 Firewall Street	Toronto	Ontario	Canada	H5E3G6	1	Neurology
breadlines@ussr.com	1313 Somewhere Street	Toronto	Ontario	Canada	H5E4G5	2	Radiology
princessprettypants@hellokittyisland.com	12134 Whatever Avenue	Ottawa	Ontario	Canada	L2F2K4	3	Oncology
neverforget@hotmail.com	767 Hot Drive	Montréal	Québec	Canada	H7H6K6	4	Dermatology

4.2 Give detail of all patients who have been admitted for 'Heart Surgery'.

```
select Patient.* from Patient
      join Admission on Patient.MedicareID=Admission.MedicareID
      where ReasonForAdmission = 'Heart_Surgery'
```

MedicareID	FirstName	LastName	Gender	DateOfBirth	Phone
1034148	Roberto	Francesco	Male	1981-03-11	7046102153

AddressStreet	AddressCity	AddressProvince	AddressCountry	AddressPostalCode
1548 Salsa Street	Surrey	British Columbia	Canada	H7A4G9

4.3 Given a medicareID, list the medical report of that patient.

```
select Patient.MedicareID , MedicalReport
      from Patient
      join Visit on Patient.MedicareID = Visit.MedicareID
      where Patient.MedicareID like '%%'
```

MedicareID	MedicalReport
1034148	stuff3.pdf
1034148	stuff13.pdf
1090156	stuff6.pdf
2345164	stuff1.pdf
2345164	stuff11.pdf
3592679	stuff2.pdf
3592679	stuff5.pdf
3592679	stuff12.pdf
3592679	stuff15.pdf
5206820	stuff18.pdf
5332134	stuff7.pdf
5332134	stuff17.pdf
7088083	stuff4.pdf
7088083	stuff8.pdf
7088083	stuff0.pdf
7088083	stuff14.pdf
7088083	stuff16.pdf
7088083	stuff10.pdf
8997693	stuff9.pdf
8997693	stuff19.pdf

4.4 Find the patients who are born before Jan 1st, 1950, order by their firstName and lastName.

```
select * from Patient
where DateOfBirth < '1950-01-01'
order by FirstName, LastName
```

MedicareID	FirstName	LastName	Gender	DateOfBirth	Phone
1521083	Carl	Brutananadilewski	Male	1906-07-11	7281899533
3416725	Connor	MacBride	Male	1911-12-04	8155428849
3592679	Francine	Fluffybuns	Female	1911-01-11	3816429356
7088083	Ivan	Ivanovitch-Ivanovsky	Male	1947-09-15	4335529948
1090156	Mike	Huntshteencks	Male	1943-05-22	8017383877
2706410	Olga	Ludwig	Female	1902-10-05	2457561062
3421685	Trevor	Tremolo	Male	1918-11-05	8098282279

AddressStreet	AddressCity	AddressProvince	AddressCountry	AddressPostalCode
2287 It Dont Matter Street	Calgary	Alberta	Canada	H7A7G7
6500 Oldtown Road	Vancouver	British Columbia	Canada	H4J7S1
6362 Tree Avenue	Rigaud	Québec	Canada	H6A8G5
6224 Tracksuit Street	Montréal	Québec	Canada	J3A8N6
3788 Bush Road	Edmonton	Alberta	Canada	H0A8J8
5097 Harvard Avenue	Montréal	Québec	Canada	A3H7F9
798 Country Road	Kingston	Ontario	Canada	H9A1H8

4.5 Give details of department that have the highest number of beds.

```
select * from Department
where NumberOfBeds =
(select max(NumberOfBeds) from Department)
```

DepartmentID	Name	AdministratorID	NumberOfBeds
3	Oncology	3	34

4.6 List the information about all the patients who have been admitted, grouped by their disease.

```
select Patient.*, ReasonForAdmission from Patient
join Admission on
      Admission.MedicareID = Patient.MedicareID
order by ReasonForAdmission
```

MedicareID	FirstName	LastName	Gender	DateOfBirth	Phone
3592679	Francine	Fluffybuns	Female	1911-01-11	3816429356
3592679	Francine	Fluffybuns	Female	1911-01-11	3816429356
1090156	Mike	Huntshteencks	Male	1943-05-22	8017383877
2345164	Don	John	Male	1976-04-14	5149384756
1034148	Roberto	Francesco	Male	1981-03-11	7046102153
7088083	Ivan	Ivanovitch-Ivanovsky	Male	1947-09-15	4335529948
8997693	Nina	Fortner	Female	1993-07-16	9052194552
7088083	Ivan	Ivanovitch-Ivanovsky	Male	1947-09-15	4335529948
2706410	Olga	Ludwig	Female	1902-10-05	2457561062
5332134	Sally	Sambers	Female	1959-11-11	8298167586

AddressStreet	AddressCity	AddressProvince	AddressCountry	AddressPostalCode	ReasonForAdmission
6362 Tree Avenue	Rigaud	Québec	Canada	H6A8G5	Amorphous Finger Pain
6362 Tree Avenue	Rigaud	Québec	Canada	H6A8G5	Back Pain
3788 Bush Road	Edmonton	Alberta	Canada	H0A8J8	Bone Spurs
456 Firewall Street	Toronto	Ontario	Canada	H5E3G6	Face Hurt
1548 Salsa Street	Surrey	British Columbia	Canada	H7A4G9	Heart Surgery
6224 Tracksuit Street	Montréal	Québec	Canada	J3A8N6	Lightsaber in Rectum
2368 Fountain Lake Road	Owen Sound	Ontario	Canada	A9D6G9	Lug Nut in Windpipe
6224 Tracksuit Street	Montréal	Québec	Canada	J3A8N6	Piercing Gone Bad
5097 Harvard Avenue	Montréal	Québec	Canada	A3H7F9	Probably Cancer
7421 Tarnation Street	Yellowknife	Yukon	Canada	J2D2S3	Stubbed Toe

4.7 Find all the patients who have been admitted to the department of Neurology.

```
select distinct Patient.* from Patient
    inner join Admission on
        Admission.MedicareID = Patient.MedicareID
    inner join Doctor on
        Doctor.EmployeeID = Admission.AssignedDoctorID
    inner join Department on
        Department.DepartmentID = Doctor.DepartmentID
where Name = 'Neurology'
```

MedicareID	FirstName	LastName	Gender	DateOfBirth	Phone
2345164	Don	John	Male	1976-04-14	5149384756
7088083	Ivan	Ivanovitch-Ivanovsky	Male	1947-09-15	4335529948
AddressStreet	AddressCity	AddressProvince	AddressCountry	AddressPostalCode	
456 Firewall Street	Toronto	Ontario	Canada	H5E3G6	
6224 Tracksuit Street	Montréal	Québec	Canada	J3A8N6	

4.8 List the name and specialty of all the doctors who live in Laval and worked or have been working for 10 years in this hospital.

```
select concat(FirstName, ' ', LastName) as Name, Specialty
    from Doctor join Employee on
        Employee.EmployeeID = Doctor.EmployeeID
    where AddressCity like '%Laval%'
    and
timestampdiff(YEAR, StartDate, IFNULL(EndDate, NOW())) >= 10
```

Name	Specialty
Jean Chrétien	Dermatology

4.9 Given a medicareID, compute the total sum of the expenses for a person in this hospital. Assume that each admission costs \$500 per night.

```
select
medID as MedicareID ,
concat(Patient.FirstName, ' ', Patient.LastName) as Name,
concat('$ ', round(sum(totalCost), 2)) TotalCost
from (
    select
        sum(500 * timestampdiff(day, Admission.DateAdmitted,
            ifnull(Admission.DateDischarged, now()))) totalCost ,
        Admission.MedicareID medID from Admission
    group by Admission.MedicareID
    union all

    select
        sum(Doctor.VisitFee) totalCost ,
        Visit.MedicareID medID from Visit
    join Doctor on Doctor.EmployeeID = Visit.DoctorID
    group by Visit.MedicareID
) Costs

join Patient on medID = Patient.MedicareID
where medID like '%%'
group by medID
```

MedicareID	Name	TotalCost
1034148	Roberto Francesco	\$152300.00
1090156	Mike Huntshteencs	\$122098.97
2345164	Don John	\$167197.94
2706410	Olga Ludwig	\$137500.00
3592679	Francine Fluffybuns	\$274600.00
5206820	John Johnson	\$205.95
5332134	Sally Sambers	\$137911.90
7088083	Ivan Ivanovitch-Ivanovsky	\$319904.92
8997693	Nina Fortner	\$137911.90