

Soluciones DDL1

A.

```
CREATE TABLE Pieces (  
  Code INTEGER PRIMARY KEY NOT NULL,  
  Name TEXT NOT NULL  
);  
  
CREATE TABLE Providers (  
  Code TEXT PRIMARY KEY NOT NULL,  
  Name TEXT NOT NULL  
);  
  
CREATE TABLE Provides (  
  Piece INTEGER  
    CONSTRAINT fk_Pieces_Code REFERENCES Pieces(Code),  
  Provider TEXT  
    CONSTRAINT fk_Providers_Code REFERENCES Providers(Code),  
  Price INTEGER NOT NULL,  
  PRIMARY KEY(Piece, Provider)  
);
```

SQL

- Inserciones en la tabla

```
INSERT INTO Providers(Code, Name) VALUES('HAL','Clarke Enterprises');  
INSERT INTO Providers(Code, Name) VALUES('RBT','Susan Calvin Corp.');
```

```
INSERT INTO Provides(Code, Name) VALUES(1,'Sprocket');  
INSERT INTO Provides(Code, Name) VALUES(2,'Screw');  
INSERT INTO Provides(Code, Name) VALUES(3,'Nut');  
INSERT INTO Provides(Code, Name) VALUES(4,'Bolt');
```

```
INSERT INTO Provides(Piece, Provider, Price) VALUES(1,'HAL',10);  
INSERT INTO Provides(Piece, Provider, Price) VALUES(1,'RBT',15);  
INSERT INTO Provides(Piece, Provider, Price) VALUES(2,'HAL',20);  
INSERT INTO Provides(Piece, Provider, Price) VALUES(2,'RBT',15);  
INSERT INTO Provides(Piece, Provider, Price) VALUES(2,'TNBC',14);  
INSERT INTO Provides(Piece, Provider, Price) VALUES(3,'RBT',50);  
INSERT INTO Provides(Piece, Provider, Price) VALUES(3,'TNBC',45);  
INSERT INTO Provides(Piece, Provider, Price) VALUES(4,'HAL',5);  
INSERT INTO Provides(Piece, Provider, Price) VALUES(4,'RBT',7);
```

SQL

B.

```
create table Scientists (  
  SSN int,  
  Name Char(30) not null,  
  Primary Key (SSN)  
);  
  
Create table Projects (  
  Code Char(4),  
  Name Char(50) not null,  
  Hours int,  
  Primary Key (Code)  
);  
  
create table AssignedTo (  
  Scientist int not null,  
  Project char(4) not null,  
  Primary Key (Scientist, Project),  
  Foreign Key (Scientist) references Scientists (SSN),  
  Foreign Key (Project) references Projects (Code)  
);
```

SQL

- Inserciones

```

INSERT INTO Scientists(SSN,Name)
VALUES(123234877,'Michael Rogers'),
      (152934485,'Anand Manikutty'),
      (222364883, 'Carol Smith'),
      (326587417,'Joe Stevens'),
      (332154719,'Mary-Anne Foster'),
      (332569843,'George ODonnell'),
      (546523478,'John Doe'),
      (631231482,'David Smith'),
      (654873219,'Zacary Efron'),
      (745685214,'Eric Goldsmith'),
      (845657245,'Elizabeth Doe'),
      (845657246,'Kumar Swamy');

INSERT INTO Projects ( Code,Name,Hours)
VALUES ('AeH1','Winds: Studying Bernoullis Principle', 156),
      ('AeH2','Aerodynamics and Bridge Design',189),
      ('AeH3','Aerodynamics and Gas Mileage', 256),
      ('AeH4','Aerodynamics and Ice Hockey', 789),
      ('AeH5','Aerodynamics of a Football', 98),
      ('AeH6','Aerodynamics of Air Hockey',89),
      ('Ast1','A Matter of Time',112),
      ('Ast2','A Puzzling Parallax', 299),
      ('Ast3','Build Your Own Telescope', 6546),
      ('Bte1','Juicy: Extracting Apple Juice with Pectinase', 321),
      ('Bte2','A Magnetic Primer Designer', 9684),
      ('Bte3','Bacterial Transformation Efficiency', 321),
      ('Che1','A Silver-Cleaning Battery', 545),
      ('Che2','A Soluble Separation Solution', 778);

INSERT INTO AssignedTo ( Scientist, Project)
VALUES (123234877,'AeH1'),
      (152934485,'AeH3'),
      (222364883,'Ast3'),
      (326587417,'Ast3'),
      (332154719,'Bte1'),
      (546523478,'Che1'),
      (631231482,'Ast3'),
      (654873219,'Che1'),
      (745685214,'AeH3'),
      (845657245,'Ast1'),
      (845657246,'Ast2'),
      (332569843,'AeH4');

```

C.

```

CREATE TABLE Employee (
  EmployeeID INTEGER PRIMARY KEY NOT NULL,
  Name TEXT NOT NULL,
  Position TEXT NOT NULL,
  Salary REAL NOT NULL,
  Remarks TEXT
);

CREATE TABLE Planet (
  PlanetID INTEGER PRIMARY KEY NOT NULL,
  Name TEXT NOT NULL,
  Coordinates REAL NOT NULL
);

CREATE TABLE Shipment (
  ShipmentID INTEGER PRIMARY KEY NOT NULL,
  Date TEXT,
  Manager INTEGER NOT NULL
  CONSTRAINT fk_Employee_EmployeeID REFERENCES Employee(EmployeeID),
  Planet INTEGER NOT NULL
  CONSTRAINT fk_Planet_PlanetID REFERENCES Planet(PlanetID)
);

CREATE TABLE Has_Clearance (
  Employee INTEGER NOT NULL
  CONSTRAINT fk_Employee_EmployeeID REFERENCES Employee(EmployeeID),
  Planet INTEGER NOT NULL
  CONSTRAINT fk_Planet_PlanetID REFERENCES Planet(PlanetID),
  Level INTEGER NOT NULL,
  PRIMARY KEY(Employee, Planet)
);

CREATE TABLE Client (
  AccountNumber INTEGER PRIMARY KEY NOT NULL,
  Name TEXT NOT NULL
);

CREATE TABLE Package (
  Shipment INTEGER NOT NULL
  CONSTRAINT fk_Shipment_ShipmentID REFERENCES Shipment(ShipmentID),
  PackageNumber INTEGER NOT NULL,
  Contents TEXT NOT NULL,
  Weight REAL NOT NULL,
  Sender INTEGER NOT NULL
  CONSTRAINT fk_Client_AccountNumber REFERENCES Client(AccountNumber),
  Recipient INTEGER NOT NULL
  CONSTRAINT fk_Client_AccountNumber REFERENCES Client(AccountNumber),
  PRIMARY KEY(Shipment, PackageNumber)
);

```

- Inserciones

```

INSERT INTO Client VALUES(1, 'Zapp Brannigan');
INSERT INTO Client VALUES(2, 'Al Gore's Head');
INSERT INTO Client VALUES(3, 'Barbados Slim');
INSERT INTO Client VALUES(4, 'Ogden Wernstrom');
INSERT INTO Client VALUES(5, 'Leo Wong');
INSERT INTO Client VALUES(6, 'Lrrr');
INSERT INTO Client VALUES(7, 'John Zoidberg');
INSERT INTO Client VALUES(8, 'John Zoidfarb');
INSERT INTO Client VALUES(9, 'Morbo');
INSERT INTO Client VALUES(10, 'Judge John Whitey');
INSERT INTO Client VALUES(11, 'Calculon');
INSERT INTO Employee VALUES(1, 'Phillip J. Fry', 'Delivery boy', 7500.0, 'Not to be confused with the Philip J. Fry from Hovering Squid World 97a');
INSERT INTO Employee VALUES(2, 'Turanga Leela', 'Captain', 10000.0, NULL);
INSERT INTO Employee VALUES(3, 'Bender Bending Rodriguez', 'Robot', 7500.0, NULL);
INSERT INTO Employee VALUES(4, 'Hubert J. Farnsworth', 'CEO', 20000.0, NULL);
INSERT INTO Employee VALUES(5, 'John A. Zoidberg', 'Physician', 25.0, NULL);
INSERT INTO Employee VALUES(6, 'Amy Wong', 'Intern', 5000.0, NULL);
INSERT INTO Employee VALUES(7, 'Hermes Conrad', 'Bureaucrat', 10000.0, NULL);
INSERT INTO Employee VALUES(8, 'Scruffy Scruffington', 'Janitor', 5000.0, NULL);
INSERT INTO Planet VALUES(1, 'Omicron Persei 8', 89475345.3545);
INSERT INTO Planet VALUES(2, 'Decapod X', 65498463216.3466);
INSERT INTO Planet VALUES(3, 'Mars', 32435021.65468);
INSERT INTO Planet VALUES(4, 'Omega III', 98432121.5464);
INSERT INTO Planet VALUES(5, 'Tarantulon VI', 849842198.354654);
INSERT INTO Planet VALUES(6, 'Cannibalon', 654321987.21654);
INSERT INTO Planet VALUES(7, 'DogDoo VII', 65498721354.688);
INSERT INTO Planet VALUES(8, 'Nintenduu 64', 6543219894.1654);
INSERT INTO Planet VALUES(9, 'Amazonia', 65432135979.6547);
INSERT INTO Has_Clearance VALUES(1, 1, 2);
INSERT INTO Has_Clearance VALUES(1, 2, 3);
INSERT INTO Has_Clearance VALUES(2, 3, 2);
INSERT INTO Has_Clearance VALUES(2, 4, 4);
INSERT INTO Has_Clearance VALUES(3, 5, 2);
INSERT INTO Has_Clearance VALUES(3, 6, 4);
INSERT INTO Has_Clearance VALUES(4, 7, 1);
INSERT INTO Shipment VALUES(1, '3004/05/11', 1, 1);
INSERT INTO Shipment VALUES(2, '3004/05/11', 1, 2);
INSERT INTO Shipment VALUES(3, NULL, 2, 3);
INSERT INTO Shipment VALUES(4, NULL, 2, 4);
INSERT INTO Shipment VALUES(5, NULL, 7, 5);
INSERT INTO Package VALUES(1, 1, 'Undeclared', 1.5, 1, 2);
INSERT INTO Package VALUES(2, 1, 'Undeclared', 10.0, 2, 3);
INSERT INTO Package VALUES(2, 2, 'A bucket of krill', 2.0, 8, 7);
INSERT INTO Package VALUES(3, 1, 'Undeclared', 15.0, 3, 4);
INSERT INTO Package VALUES(3, 2, 'Undeclared', 3.0, 5, 1);
INSERT INTO Package VALUES(3, 3, 'Undeclared', 7.0, 2, 3);
INSERT INTO Package VALUES(4, 1, 'Undeclared', 5.0, 4, 5);
INSERT INTO Package VALUES(4, 2, 'Undeclared', 27.0, 1, 2);
INSERT INTO Package VALUES(5, 1, 'Undeclared', 100.0, 5, 1);

```

D.

```

CREATE TABLE Alumno (
    NumMatricula smallint primary key,
    Nombre varchar(50) not null,
    FechaNacimiento Date not null
    Teléfono int(10)
);

CREATE TABLE Asignatura (
    CodAsignatura int primary key,
    Nombre varchar(50) not null,
    IdProfesor int,
    Foreign Key (IdProfesor) references Profesor(IdProfesor)
);

CREATE TABLE Profesor (
    IdProfesor int primary key,
    NIF_P varchar(10) unique key,
    Nombre varchar (50),
    Especialidad varchar(50),
    Teléfono int(10)
);

CREATE TABLE Recibe (
    NumMatricula int,
    CodAsignatura int,
    CursoEscolar int,
    Primary key(NumMatricula, CodAsignatura, CursoEscolar)
    Foreign Key(NumMatricula) references Asignatura(CodAsignatura),
    Foreign Key(CodAsignatura) references Asignatura(CodAsignatura)
);

```

E.

```
CREATE TABLE Empleado (  
    ID int primary key,  
    DNI varchar(10),  
    Nombre varchar(20),  
    FechaNacimiento Date,  
    Telefono varchar(15),  
    Unique Key(DNI)  
);  
  
CREATE TABLE Localidad (  
    CodLocalidad varchar(10) primary key,  
    Nombre varchar(25),  
    CodProvincia char(4),  
    Foreign Key(CodProvincia) references Provincia(CodProvincia)  
);  
  
CREATE TABLE Provincia(  
    CodProvincia char(4) Primary Key,  
    Nombre varchar(25),  
    CodRegion char(4),  
    Foreign Key(CodRegion) references Region(CodRegion)  
);  
  
CREATE TABLE Region(  
    CodRegion char(4) Primary Key,  
    Nombre varchar(25)  
)
```

F.

```

CREATE TABLE Physician (
    EmployeeID INTEGER PRIMARY KEY NOT NULL,
    Name TEXT NOT NULL,
    Position TEXT NOT NULL,
    SSN INTEGER NOT NULL
);

CREATE TABLE Department (
    DepartmentID INTEGER PRIMARY KEY NOT NULL,
    Name TEXT NOT NULL,
    Head INTEGER NOT NULL
    CONSTRAINT fk_Physician_EmployeeID REFERENCES Physician(EmployeeID)
);

CREATE TABLE Affiliated_With (
    Physician INTEGER NOT NULL
    CONSTRAINT fk_Physician_EmployeeID REFERENCES Physician(EmployeeID),
    Department INTEGER NOT NULL
    CONSTRAINT fk_Department_DepartmentID REFERENCES Department(DepartmentID),
    PrimaryAffiliation BOOLEAN NOT NULL,
    PRIMARY KEY(Physician, Department)
);

CREATE TABLE Procedure (
    Code INTEGER PRIMARY KEY NOT NULL,
    Name TEXT NOT NULL,
    Cost REAL NOT NULL
);

CREATE TABLE Trained_In (
    Physician INTEGER NOT NULL
    CONSTRAINT fk_Physician_EmployeeID REFERENCES Physician(EmployeeID),
    Treatment INTEGER NOT NULL
    CONSTRAINT fk_Procedure_Code REFERENCES Procedure(Code),
    CertificationDate DATETIME NOT NULL,
    CertificationExpires DATETIME NOT NULL,
    PRIMARY KEY(Physician, Treatment)
);

CREATE TABLE Patient (
    SSN INTEGER PRIMARY KEY NOT NULL,
    Name TEXT NOT NULL,
    Address TEXT NOT NULL,
    Phone TEXT NOT NULL,
    InsuranceID INTEGER NOT NULL,
    PCP INTEGER NOT NULL
    CONSTRAINT fk_Physician_EmployeeID REFERENCES Physician(EmployeeID)
);

CREATE TABLE Nurse (
    EmployeeID INTEGER PRIMARY KEY NOT NULL,
    Name TEXT NOT NULL,
    Position TEXT NOT NULL,
    Registered BOOLEAN NOT NULL,
    SSN INTEGER NOT NULL
);

CREATE TABLE Appointment (
    AppointmentID INTEGER PRIMARY KEY NOT NULL,
    Patient INTEGER NOT NULL
    CONSTRAINT fk_Patient_SSN REFERENCES Patient(SSN),
    PrepNurse INTEGER
    CONSTRAINT fk_Nurse_EmployeeID REFERENCES Nurse(EmployeeID),
    Physician INTEGER NOT NULL
    CONSTRAINT fk_Physician_EmployeeID REFERENCES Physician(EmployeeID),
    Start DATETIME NOT NULL,
    End DATETIME NOT NULL,
    ExaminationRoom TEXT NOT NULL
);

CREATE TABLE Medication (
    Code INTEGER PRIMARY KEY NOT NULL,
    Name TEXT NOT NULL,
    Brand TEXT NOT NULL,
    Description TEXT NOT NULL
);

CREATE TABLE Prescribes (
    Physician INTEGER NOT NULL
    CONSTRAINT fk_Physician_EmployeeID REFERENCES Physician(EmployeeID),
    Patient INTEGER NOT NULL
    CONSTRAINT fk_Patient_SSN REFERENCES Patient(SSN),
    Medication INTEGER NOT NULL
    CONSTRAINT fk_Medication_Code REFERENCES Medication(Code),
    Date DATETIME NOT NULL,
    Appointment INTEGER
    CONSTRAINT fk_Appointment_AppointmentID REFERENCES Appointment(AppointmentID),
    Dose TEXT NOT NULL,

```

```

PRIMARY KEY(Physician, Patient, Medication, Date)
);

CREATE TABLE Block (
  Floor INTEGER NOT NULL,
  Code INTEGER NOT NULL,
  PRIMARY KEY(Floor, Code)
);
--Múltiples FK dos a dos PK
CREATE TABLE Room (
  Number INTEGER PRIMARY KEY NOT NULL,
  Type TEXT NOT NULL,
  BlockFloor INTEGER NOT NULL,
  BlockCode INTEGER NOT NULL,
  Unavailable BOOLEAN NOT NULL,
  FOREIGN KEY(BlockFloor, BlockCode) REFERENCES Block (Floor,Code)
);

CREATE TABLE On_Call (
  Nurse INTEGER NOT NULL
  CONSTRAINT fk_Nurse_EmployeeID REFERENCES Nurse(EmployeeID),
  BlockFloor INTEGER NOT NULL,
  BlockCode INTEGER NOT NULL,
  Start DATETIME NOT NULL,
  End DATETIME NOT NULL,
  PRIMARY KEY(Nurse, BlockFloor, BlockCode, Start, End),
  FOREIGN KEY(BlockFloor, BlockCode) REFERENCES Block(Floor,Code)
);

CREATE TABLE Stay (
  StayID INTEGER PRIMARY KEY NOT NULL,
  Patient INTEGER NOT NULL
  CONSTRAINT fk_Patient_SSN REFERENCES Patient(SSN),
  Room INTEGER NOT NULL
  CONSTRAINT fk_Room_Number REFERENCES Room(Number),
  Start DATETIME NOT NULL,
  End DATETIME NOT NULL
);

CREATE TABLE Undergoes (
  Patient INTEGER NOT NULL
  CONSTRAINT fk_Patient_SSN REFERENCES Patient(SSN),
  Procedure INTEGER NOT NULL
  CONSTRAINT fk_Procedure_Code REFERENCES Procedure(Code),
  Stay INTEGER NOT NULL
  CONSTRAINT fk_Stay_StayID REFERENCES Stay(StayID),
  Date DATETIME NOT NULL,
  Physician INTEGER NOT NULL
  CONSTRAINT fk_Physician_EmployeeID REFERENCES Physician(EmployeeID),
  AssistingNurse INTEGER
  CONSTRAINT fk_Nurse_EmployeeID REFERENCES Nurse(EmployeeID),
  PRIMARY KEY(Patient, Procedure, Stay, Date)
);

```

- Inserciones

```

INSERT INTO Physician VALUES(1,'John Dorian','Staff Internist',11111111);
INSERT INTO Physician VALUES(2,'Elliot Reid','Attending Physician',22222222);
INSERT INTO Physician VALUES(3,'Christopher Turk','Surgical Attending Physician',33333333);
INSERT INTO Physician VALUES(4,'Percival Cox','Senior Attending Physician',44444444);
INSERT INTO Physician VALUES(5,'Bob Kelso','Head Chief of Medicine',55555555);
INSERT INTO Physician VALUES(6,'Todd Quinlan','Surgical Attending Physician',66666666);
INSERT INTO Physician VALUES(7,'John Wen','Surgical Attending Physician',77777777);
INSERT INTO Physician VALUES(8,'Keith Dudemeister','MD Resident',88888888);
INSERT INTO Physician VALUES(9,'Molly Clock','Attending Psychiatrist',99999999);

INSERT INTO Department VALUES(1,'General Medicine',4);
INSERT INTO Department VALUES(2,'Surgery',7);
INSERT INTO Department VALUES(3,'Psychiatry',9);

INSERT INTO Affiliated_With VALUES(1,1,1);
INSERT INTO Affiliated_With VALUES(2,1,1);
INSERT INTO Affiliated_With VALUES(3,1,0);
INSERT INTO Affiliated_With VALUES(3,2,1);
INSERT INTO Affiliated_With VALUES(4,1,1);
INSERT INTO Affiliated_With VALUES(5,1,1);
INSERT INTO Affiliated_With VALUES(6,2,1);
INSERT INTO Affiliated_With VALUES(7,1,0);
INSERT INTO Affiliated_With VALUES(7,2,1);
INSERT INTO Affiliated_With VALUES(8,1,1);
INSERT INTO Affiliated_With VALUES(9,3,1);

INSERT INTO Procedure VALUES(1,'Reverse Rhinopodoplasty',1500.0);
INSERT INTO Procedure VALUES(2,'Obtuse Pyloric Recombobulation',3750.0);
INSERT INTO Procedure VALUES(3,'Folded Demiophthalmectomy',4500.0);
INSERT INTO Procedure VALUES(4,'Complete Wallectomy',10000.0);
INSERT INTO Procedure VALUES(5,'Obfuscated Dermogastrotomy',4899.0);
INSERT INTO Procedure VALUES(6,'Reversible Pancreomyoplasty',5600.0);
INSERT INTO Procedure VALUES(7,'Follicular Demiectomy',25.0);

INSERT INTO Patient VALUES(100000001,'John Smith','42 Foobar Lane','555-0256',68476213,1);
INSERT INTO Patient VALUES(100000002,'Grace Ritchie','37 Snafu Drive','555-0512',36546321,2);
INSERT INTO Patient VALUES(100000003,'Random J. Patient','101 Omgbbq Street','555-1204',65465421,2);
INSERT INTO Patient VALUES(100000004,'Dennis Doe','1100 Foobaz Avenue','555-2048',68421879,3);

INSERT INTO Nurse VALUES(101,'Carla Espinosa','Head Nurse',1,111111110);
INSERT INTO Nurse VALUES(102,'Laverne Roberts','Nurse',1,222222220);
INSERT INTO Nurse VALUES(103,'Paul Flowers','Nurse',0,333333330);

INSERT INTO Appointment VALUES(13216584,100000001,101,1,'2008-04-24 10:00','2008-04-24 11:00','A');
INSERT INTO Appointment VALUES(26548913,100000002,101,2,'2008-04-24 10:00','2008-04-24 11:00','B');
INSERT INTO Appointment VALUES(36549879,100000001,102,1,'2008-04-25 10:00','2008-04-25 11:00','A');
INSERT INTO Appointment VALUES(46846589,100000004,103,4,'2008-04-25 10:00','2008-04-25 11:00','B');
INSERT INTO Appointment VALUES(59871321,100000004,NULL,4,'2008-04-26 10:00','2008-04-26 11:00','C');
INSERT INTO Appointment VALUES(69879231,100000003,103,2,'2008-04-26 11:00','2008-04-26 12:00','C');
INSERT INTO Appointment VALUES(76983231,100000001,NULL,3,'2008-04-26 12:00','2008-04-26 13:00','C');
INSERT INTO Appointment VALUES(86213939,100000004,102,9,'2008-04-27 10:00','2008-04-21 11:00','A');
INSERT INTO Appointment VALUES(93216548,100000002,101,2,'2008-04-27 10:00','2008-04-27 11:00','B');

INSERT INTO Medication VALUES(1,'Procrastin-X','X','N/A');
INSERT INTO Medication VALUES(2,'Thesisin','Foo Labs','N/A');
INSERT INTO Medication VALUES(3,'Awakin','Bar Laboratories','N/A');
INSERT INTO Medication VALUES(4,'Crescavitin','Baz Industries','N/A');
INSERT INTO Medication VALUES(5,'Melioraurin','Snafu Pharmaceuticals','N/A');

INSERT INTO Prescribes VALUES(1,100000001,1,'2008-04-24 10:47',13216584,'5');
INSERT INTO Prescribes VALUES(9,100000004,2,'2008-04-27 10:53',86213939,'10');
INSERT INTO Prescribes VALUES(9,100000004,2,'2008-04-30 16:53',NULL,'5');

INSERT INTO Block VALUES(1,1);
INSERT INTO Block VALUES(1,2);
INSERT INTO Block VALUES(1,3);
INSERT INTO Block VALUES(2,1);
INSERT INTO Block VALUES(2,2);
INSERT INTO Block VALUES(2,3);
INSERT INTO Block VALUES(3,1);
INSERT INTO Block VALUES(3,2);
INSERT INTO Block VALUES(3,3);
INSERT INTO Block VALUES(4,1);
INSERT INTO Block VALUES(4,2);
INSERT INTO Block VALUES(4,3);

INSERT INTO Room VALUES(101,'Single',1,1,0);
INSERT INTO Room VALUES(102,'Single',1,1,0);
INSERT INTO Room VALUES(103,'Single',1,1,0);
INSERT INTO Room VALUES(111,'Single',1,2,0);
INSERT INTO Room VALUES(112,'Single',1,2,1);
INSERT INTO Room VALUES(113,'Single',1,2,0);
INSERT INTO Room VALUES(121,'Single',1,3,0);
INSERT INTO Room VALUES(122,'Single',1,3,0);
INSERT INTO Room VALUES(123,'Single',1,3,0);
INSERT INTO Room VALUES(201,'Single',2,1,1);
INSERT INTO Room VALUES(202,'Single',2,1,0);
INSERT INTO Room VALUES(203,'Single',2,1,0);

```



```

INSERT INTO Room VALUES(211,'Single',2,2,0);
INSERT INTO Room VALUES(212,'Single',2,2,0);
INSERT INTO Room VALUES(213,'Single',2,2,1);
INSERT INTO Room VALUES(221,'Single',2,3,0);
INSERT INTO Room VALUES(222,'Single',2,3,0);
INSERT INTO Room VALUES(223,'Single',2,3,0);
INSERT INTO Room VALUES(301,'Single',3,1,0);
INSERT INTO Room VALUES(302,'Single',3,1,1);
INSERT INTO Room VALUES(303,'Single',3,1,0);
INSERT INTO Room VALUES(311,'Single',3,2,0);
INSERT INTO Room VALUES(312,'Single',3,2,0);
INSERT INTO Room VALUES(313,'Single',3,2,0);
INSERT INTO Room VALUES(321,'Single',3,3,1);
INSERT INTO Room VALUES(322,'Single',3,3,0);
INSERT INTO Room VALUES(323,'Single',3,3,0);
INSERT INTO Room VALUES(401,'Single',4,1,0);
INSERT INTO Room VALUES(402,'Single',4,1,1);
INSERT INTO Room VALUES(403,'Single',4,1,0);
INSERT INTO Room VALUES(411,'Single',4,2,0);
INSERT INTO Room VALUES(412,'Single',4,2,0);
INSERT INTO Room VALUES(413,'Single',4,2,0);
INSERT INTO Room VALUES(421,'Single',4,3,1);
INSERT INTO Room VALUES(422,'Single',4,3,0);
INSERT INTO Room VALUES(423,'Single',4,3,0);

INSERT INTO On_Call VALUES(101,1,1,'2008-11-04 11:00','2008-11-04 19:00');
INSERT INTO On_Call VALUES(101,1,2,'2008-11-04 11:00','2008-11-04 19:00');
INSERT INTO On_Call VALUES(102,1,3,'2008-11-04 11:00','2008-11-04 19:00');
INSERT INTO On_Call VALUES(103,1,1,'2008-11-04 19:00','2008-11-05 03:00');
INSERT INTO On_Call VALUES(103,1,2,'2008-11-04 19:00','2008-11-05 03:00');
INSERT INTO On_Call VALUES(103,1,3,'2008-11-04 19:00','2008-11-05 03:00');

INSERT INTO Stay VALUES(3215,100000001,111,'2008-05-01','2008-05-04');
INSERT INTO Stay VALUES(3216,100000003,123,'2008-05-03','2008-05-14');
INSERT INTO Stay VALUES(3217,100000004,112,'2008-05-02','2008-05-03');

INSERT INTO Undergoes VALUES(100000001,6,3215,'2008-05-02',3,101);
INSERT INTO Undergoes VALUES(100000001,2,3215,'2008-05-03',7,101);
INSERT INTO Undergoes VALUES(100000004,1,3217,'2008-05-07',3,102);
INSERT INTO Undergoes VALUES(100000004,5,3217,'2008-05-09',6,NULL);
INSERT INTO Undergoes VALUES(100000001,7,3217,'2008-05-10',7,101);
INSERT INTO Undergoes VALUES(100000004,4,3217,'2008-05-13',3,103);

INSERT INTO Trained_In VALUES(3,1,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(3,2,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(3,5,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(3,6,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(3,7,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(6,2,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(6,5,'2007-01-01','2007-12-31');
INSERT INTO Trained_In VALUES(6,6,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(7,1,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(7,2,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(7,3,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(7,4,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(7,5,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(7,6,'2008-01-01','2008-12-31');
INSERT INTO Trained_In VALUES(7,7,'2008-01-01','2008-12-31');

```

- Ejercicio 2 Solución:Sentencias SQL de creación de tablas:

```
CREATE TABLE pub (
  cod_pub      VARCHAR(5)   NOT NULL,
  nombre       VARCHAR(60)  NOT NULL,
  licencia_fiscal VARCHAR(60) NOT NULL,
  domicilio    VARCHAR(60)  ,
  fecha_apertura DATE       NOT NULL,
  horario      VARCHAR(60)  NOT NULL,
  cod_localidad INTEGER      NOT NULL
);
```

```
CREATE TABLE titular (
  dni_titular  VARCHAR(8)   NOT NULL,
  nombre       VARCHAR(60)  NOT NULL,
  domicilio    VARCHAR(60)  ,
  cod_pub      VARCHAR(5)   NOT NULL
);
```

```
CREATE TABLE empleado (
  dni_empleado VARCHAR(8)   NOT NULL,
  nombre       VARCHAR(60)  NOT NULL,
  domicilio    VARCHAR(60)
);
```

```
CREATE TABLE existencias (
  cod_articulo VARCHAR(10)  NOT NULL,
  nombre       VARCHAR(60)  NOT NULL,
  cantidad     INTEGER      NOT NULL,
  precio       DECIMAL      NOT NULL,
  cod_pub      VARCHAR(5)   NOT NULL
);
```

```
CREATE TABLE localidad (
  cod_localidad INTEGER      NOT NULL,
  nombre       VARCHAR(60)  NOT NULL
);
```

```
CREATE TABLE pub_empleado (
  cod_pub      VARCHAR(5)   NOT NULL,
  dni_empleado VARCHAR(8)   NOT NULL,
  funcion      VARCHAR(9)   NOT NULL
);
```

Sentencias SQL de creación restricciones:

```
ALTER TABLE pub ADD CONSTRAINT pk_pub PRIMARY KEY (cod_pub) ;
ALTER TABLE localidad ADD CONSTRAINT pk_localidad PRIMARY KEY (cod_localidad) ;
ALTER TABLE titular ADD CONSTRAINT pk_titular PRIMARY KEY (dni_titular) ;
ALTER TABLE empleado ADD CONSTRAINT pk_empleado PRIMARY KEY (dni_empleado) ;
ALTER TABLE existencias ADD CONSTRAINT pk_existencias PRIMARY KEY (cod_articulo) ;
ALTER TABLE pub_empleado ADD CONSTRAINT pk_pub_empleado PRIMARY KEY (cod_pub, dni_empleado, funcion) ;
ALTER TABLE pub ADD CONSTRAINT fk_pub_localidad FOREIGN KEY (cod_localidad) REFERENCES localidad (cod_localidad) ;
ALTER TABLE titular ADD CONSTRAINT fk_titular_pu FOREIGN KEY (cod_pub) REFERENCES pub (cod_pub) ;
ALTER TABLE existencias ADD CONSTRAINT fk_existencias_pub FOREIGN KEY (cod_pub) REFERENCES pub (cod_pub) ;
ALTER TABLE pub_empleado ADD CONSTRAINT fk_pubemple_pub FOREIGN KEY (cod_pub) REFERENCES pub(cod_pub) ;
ALTER TABLE pub_empleado ADD CONSTRAINT fk_pubemple_empleado FOREIGN KEY (dni_empleado) REFERENCES empleado (dni_empleado) ;
ALTER TABLE pub ADD CONSTRAINT ck_horario CHECK (horario IN ('HOR1', 'HOR2', 'HOR3')) ;
ALTER TABLE existencias ADD CONSTRAINT ck_precio CHECK (precio <> 0) ;
ALTER TABLE pub_empleado ADD CONSTRAINT ck_funcion CHECK (funcion IN ('CAMARERO', 'SEGURIDAD', 'LIMPIEZA')) ;
```