```sql
/*
Student: Jordan Laing 19487922
Date: 18/02/20
*/

/*
This table records the staff within the company.
they are given a staffID to be able to refrence them and make all users unique
The role and the gender colums also have constraints on the inputs that are accepted
*/
CREATE TABLE STAFF
(
StaffId CHAR(2) PRIMARY KEY,
FirstName VARCHAR(20),
LastName VARCHAR(20),
Role VARCHAR(15) CHECK(Role IN('GP','Surgeon','Reception','GP Intern','Nurse','Senior
Nurse','Nurse Intern','Marketing')),
Gender CHAR(1) CHECK(Gender IN('M','F')),
DateJoined DATE NOT NULL,
DateLeft DATE /*this is able to be null since the staff may have joined but not left*/
);

/*a table to list all speciality that each employee can be.Its given an id so it can be
refrenced*/
CREATE TABLE SPECIALITY
(
SpecId CHAR(4) PRIMARY KEY,
SpecName VARCHAR(25),
SpecNotes VARCHAR(100)
);

/*Organises the charge using a code to be later refrenced in another table*/
CREATE TABLE CHARGES
(
ChrgCode CHAR(7) PRIMARY KEY,
ChrgDescription VARCHAR(80) NOT NULL,
Duration NUMBER(2) NOT NULL CHECK(Duration <= 60),
HourlyRate NUMBER(3) CHECK(HourlyRate < 400)
);

/*This tables bring the SpecID from the speciality table and teh StaffID from the staff
table to create a composite key*/
CREATE TABLE STAFF_SPECIALITY
(
StaffId CHAR(2) REFERENCES STAFF(StaffId),
SpecId CHAR(4) REFERENCES SPECIALITY(SpecId),
DateQualified DATE NOT NULL,
ValidTillDate DATE,
Details VARCHAR(100),
PRIMARY KEY(StaffId,SpecId)
);

/*this also creates a composite key using Chrgcode and StaffID from teh Charges and
Staff tables*/
CREATE TABLE CONSULTATION
(
ChrgCode CHAR(7) REFERENCES CHARGES(ChrgCode),
StaffId CHAR(2) REFERENCES STAFF(StaffId),
DateConsulted DATE NOT NULL,
StartTime NUMBER(4,2),
PatientNo CHAR(7),
PRIMARY KEY(ChrgCode,StaffId)
);


/*Staff Data Insert*/
INSERT INTO STAFF(StaffId,FirstName,LastName,Role,Gender,DateJoined)
VALUES (1,'Homer','Simpson','GP','M','21-Apr-2015');
INSERT INTO STAFF(StaffId,FirstName,LastName,Role,Gender,DateJoined)
```

```sql
66      VALUES (2,'Marge','Simpson','Reception','F','27-Apr-2015');
67      INSERT INTO STAFF(StaffId,FirstName,LastName,Role,Gender,DateJoined)
68      VALUES (3,'Apu','Nahasapeemapetilon','Surgeon','M','14-May-2015');
69      INSERT INTO STAFF(StaffId,FirstName,LastName,Role,Gender,DateJoined)
70      VALUES (4,'Kent','Brockman','Marketing','M','14-May-2015');
71      INSERT INTO STAFF(StaffId,FirstName,LastName,Role,Gender,DateJoined)
72      VALUES (5,'Patty','Bouvier','Reception','F','23-Mar-2016');
73      INSERT INTO STAFF(StaffId,FirstName,LastName,Role,Gender,DateJoined)
74      VALUES (6,'Selma','Bouvier','Senior Nurse','F','27-Mar-2016');
75      INSERT INTO STAFF(StaffId,FirstName,LastName,Role,Gender,DateJoined)
76      VALUES (7,'Ned','Flanders','Nurse','M','18-Oct-2016');
77      INSERT INTO STAFF
78      VALUES (8,'Ralph','Wiggum','Marketing','M','23-Jan-2017','24-Jun-2017');
79      INSERT INTO STAFF(StaffId,FirstName,LastName,Role,Gender,DateJoined)
80      VALUES (9,'Montgomery','Burns','Marketing','M','3-Feb-2017');
81      INSERT INTO STAFF
82      VALUES (10,'Lisa','Simpson','GP','F','4-Dec-2017','17-Aug-2018');
83      INSERT INTO STAFF(StaffId,FirstName,LastName,Role,Gender,DateJoined)
84      VALUES (11,'Disco','Stu','Nurse Intern','M','27-Mar-2018');
85      INSERT INTO STAFF(StaffId,FirstName,LastName,Role,Gender,DateJoined)
86      VALUES (12,'Jordan','Laing','Nurse Intern','M','2-Mar-2020');
87
88
89      /*Speciality Data Insert*/
90      INSERT INTO SPECIALITY
91      VALUES(0123,'General Consultancy','Includes all areas as a GP');
92      INSERT INTO SPECIALITY
93      VALUES(0124,'Emergency Care','Can perform minor surgeries');
94      INSERT INTO SPECIALITY
95      VALUES(0125,'Vaccination','Generally taken care of by nurse');
96      INSERT INTO SPECIALITY
97      VALUES(0126,'Tests','Collect samples for testing as required by GP or Surgeon');
98      INSERT INTO SPECIALITY
99      VALUES(0127,'Repeat Prescription','Generally taken care of by a nurse');
100
101
102     /*Charges Data Insert*/
103     INSERT INTO Charges
104     VALUES(0081,'General GP consultation for registered patients',20,180);
105     INSERT INTO Charges
106     VALUES(0082,'General GP consultation for casual patients',20,360);
107     INSERT INTO Charges
108     VALUES(0085,'Emergency Medical Care for registered or casual patients',30,0);
109     INSERT INTO Charges
110     VALUES(0086,'Vaccination or Test collection for registered patients',15,0);
111     INSERT INTO Charges
112     VALUES(0088,'Vaccination or Test collection for casual patients',15,40);
113     INSERT INTO Charges
114     VALUES(0089,'Repeat Prescription',5,5);
115
116
117     /*Consultation Data Insert*/
118     INSERT INTO Consultation
119     VALUES(0082,1,'1-Sep-2018',8.30,'A012345');
120     INSERT INTO Consultation
121     VALUES(0085,3,'4-Sep-2018',9.45,'N333333');
122     INSERT INTO Consultation
123     VALUES(0085,7,'6-Sep-2018',9.45,'I445566');
124     INSERT INTO Consultation
125     VALUES(0086,7,'6-Sep-2018',10.30,'K222333');
126     INSERT INTO Consultation
127     VALUES(0089,12,'7-Sep-2018',10.45,'A343434');
128
129
130     /*Staff_Speciality Data Insert*/
131     INSERT INTO STAFF_SPECIALITY
132     VALUES(1,0123,'24-Apr-2014','23-Apr-2024','General Practitioner license renewed');
133     INSERT INTO STAFF_SPECIALITY
134     VALUES(1,0124,'14-May-2016','14-Nov-2021','Certified only to assist a surgery');
```

```sql
135    INSERT INTO STAFF_SPECIALITY
136    VALUES(3,0124,'01-Aug-2015','31-Jul-2020','Special certification  in emergency care');
137    INSERT INTO STAFF_SPECIALITY
138    VALUES(6,0125,'25-Jul-2017','24-Jul-2019','Renewed license');
139    INSERT INTO STAFF_SPECIALITY
140    VALUES(7,0124,'01-Aug-2015','31-Jul-2020','Can assist a surgeon in emergency care');
141    INSERT INTO STAFF_SPECIALITY
142    VALUES(7,0126,'17-Jul-2015','16-Jul-2020','Renewed license');
143    INSERT INTO STAFF_SPECIALITY
144    VALUES(11,0127,'01-Aug-2017','31-Aug-2018','Intern under training');
145    INSERT INTO STAFF_SPECIALITY
146    VALUES(12,0127,'03-Aug-2017','02-Sep-2018','Intern under training');
147
148
149    /*Queries*/
150    /*Displays all the tables that are stored on the database*/
151    SELECT table_name
152    FROM user_tables;
153
154    /*Displays the structure of the specified table(staff,speciality,...)*/
155    DESCRIBE staff;
156    DESCRIBE speciality;
157    DESCRIBE charges;
158    DESCRIBE consultation;
159    DESCRIBE staff_speciality;
160
161    /*Displays the uploaded data currently in the specified database and doesnt filter the
       data displayed*/
162    SELECT *
163    FROM staff;
164    SELECT *
165    FROM speciality;
166    SELECT *
167    FROM charges;
168    SELECT *
169    FROM consultation;
170    SELECT *
171    FROM staff_speciality;
172
173    /*displays the data from the staff table and filters the collums that it displays*/
174    /*it combines the first and last name of the staff using ||''|| to display 'Full Name'*/
175    SELECT staffid "Staff Id",firstname||' '||lastname "Staff Full Name",datejoined "Date
       Joined",dateleft "Date Left"
176    FROM staff
177    ORDER BY firstname ASC;
```