Ulric Aird

Normalization Activity

Original Table

staffNo	dentistName	patientNo	patientName	appointment date	appointment time	surgeryNo
S1011	Tony Smith	P100	Gillian White	12-Aug-03	10:00	S10
S1011	Tony Smith	P105	Jill Bell	13-Aug-03	12:00	S15
S1024	Helen Pearson	P108	Ian MacKay	12-Sep-03	10:00	S10
S1024	Helen Pearson	P108	Ian MacKay	14-Sep-03	10:00	S10
S1032	Robin Plevin	P105	Jill Bell	14-Oct-03	16:30	S15
S1032	Robin Plevin	P110	John Walker	15-Oct-03	18:00	S13

Dentist Table

Since there is a relationship between 'staffNo' and 'dentistName', we can say that 'staffNo' is the primary key for the dentist.

staffNo	dentistName
S1011	Tony Smith
S1024	Helen Pearson
S1032	Robin Plevin

Staff Table

Since the dentist may have staff members working with him, we create a table that contains all the staff members with their staff id.

staffId	staffNo	staffName
1	S1011	John Cole
2	S1011	Jane Smith
3	S1024	Mark Naber
4	S1024	Taylor Swipe
5	S1032	Harry Ice
6	S1032	Ray Mark

Patients Table

Since there is a relationship between the 'patientNo' and the 'patientName', we can say that the 'patientNo' is the primary key for the patient.

patientNo	patientName
P100	Gillian White
P105	Jill Bell
P108	Ian MacKay
P110	John Walker

Surgery Table

A table containing the information about the type of surgeries where the 'surgeryNo' is the primary key.

surgeryNo	SurgeryName
S10	Tooth Removal
S13	Dental Implant
S15	Root Canal

Appointment Table

This contains the information for the appointment, where we have staffNo, patientNo and surgeryNo, as a foreign key from the different tables mentioned.

appointmentId	staffNo	patientNo	appointment date	appointment time	surgeryNo
1	S1011	P100	12-Aug-03	10:00	S10
2	S1011	P105	13-Aug-03	12:00	S15
3	S1024	P108	12-Sep-03	10:00	S10
4	S1024	P108	14-Sep-03	10:00	S10
5	S1032	P105	14-Oct-03	16:30	S15
6	S1032	P110	15-Oct-03	18:00	S13