

HOMEWORK 8

Berna Altun - 16050111040

Kaan Abbasoğlu - 16050111030

Question: The First normal form simply says that each cell of a table should contain exactly one value. Let us take an example. Suppose we are storing the courses that a particular students takes, we can store it like this.

student_id	student_name	lesson_name	lesson_id	lecturer_name
16050111030	Kaan Abbasoğlu	Java,sql	201,301	Evren Aykaç,Fatih Nar
16050111040	Berna Altun	C,java,sql	101,201,301	Evren Aykaç,Fatih Nar

Solution: Here, the issue is that in the first row, we are storing courses against Berna and Kaan. This isn't the optimal way since that's now how SQL databases are designed to be used. A better method would be to store the courses separately. For instance:

1NF

student_id	student_name	lesson_name	lesson_id	lecturer_name
16050111030	Kaan Abbasoğlu	Java	201	Evren Aykaç
16050111030	Kaan Abbasoğlu	Sql	301	Fatih Nar
16050111040	Berna Altun	C	101	Evren Aykaç
16050111040	Berna Altun	Java	201	Evren Aykaç
16050111040	Berna Altun	Sql	301	Fatih Nar

2NF

Student

student_id	student_name
16050111030	Kaan Abbasoğlu
16050111040	Berna Altun

Lesson

lesson_name	lesson_id	lecturer_name
C	101	Evren Aykaç
Java	201	Evren Aykaç
Sql	301	Fatih Nar

Student_lesson

Pid	lesson_id	student_id
1	101	16050111040
2	201	16050111030
3	201	16050111040
4	301	16050111030
5	301	16050111040