

Theoretical Part

1. Describe in your own words by using an example the ...

- ... not trivial functional dependence
- ... trivial functional dependence
- ... transitive dependence

The following table can be used for it:

The following table is given:

ID	Name	Vorname	Geb-Dat	Geb-Ort	Typ	Typ-Beschreibung
1	Fritz	Lutz	01.09.1990	Köln	1	Arbeitnehmer
2	Bond	James	29.03.1989	Bonn	2	Arbeitgeber
3	Ulrich	Karl	24.12.1980	Köln	1	Arbeitnehmer
4	Fritz	Lutz	08.09.1979	Bonn	2	Arbeitgeber
5	Öz	Mustafa	24.06.1998	Bonn	2	Arbeitgeber

2. Try to explain in your own word the ...

- ... 1. normal form
- ... 2. normal form
- ... 3. normal form
- (***VOLUNTARY***)
... BCNF normal form

3. Please normalize the following table by using the three normal forms:

<u>SchülerNr</u>	Name	Vorname	Klasse	Klassen-lehrer	<u>Lehrangebotsnr</u>	Beschreibung	Zeit (h)
1	Müller	Hans	9aG	Kirchstein	3	Mathe	4
2	Özkan	Murat	10bG	Jocher	2, 7, 12	Englisch, Sport, Musik	3, 2, 1
3	Valenti	Gaetano	8aH	Ehlert	3	Mathe	3
4	Madmar	Mohamed	8aH	Ehlert	7	Sport	6
5	Floresta	Giusy	9aR	Mendez	3	Mathe	4

Remarks:

- Mark in every table the Keys, by underlining the attribute!
- Please do it step by step!!!