

Theoretical Part

1. Describe in your own words what is meant with **candidate key**? Which two important properties should a candidate key have?
2. Describe two criteria's for a „good“ Primary Key! Why do they have such a deep impact for us?
3. Explain in your own words what a Foreign Key is and why do we need this attribute for our referential integrity?
4. Example cases (referential integrity)
The following tables are available:

person

<u>vnam</u>	<u>nnam</u>	<u>str</u>	<u>ortID</u>
Hans	Peter	Musterstr. 12	2
Schubert	Matthias	Beethovenstr. 87	3
Merkel	Angela	Berliner Str. 1	1
Geller	Uri	Hüpfweg 89	2
Blanco	Roberto	Geier Allee 89	8

ort

ID	ort
1	Berlin
2	Hamburg
3	Köln
4	Duisburg
5	Bremen
6	Frankfurt
7	Darmstadt
8	Nürnberg
9	München
10	Dietzenbach

- a. You want to **insert** a dataset into person. In the attribute ortID you want to insert “12”!
 - b. You want to **update** a dataset into person. In the attribute ortID you want to insert “16”!
 - c. You want to **change** the ID 8 to 12 from ort.
 - d. You want to **delete** the ID 1 from ort.
5. Describe which settings can be used while creating a Foreign Key. Discuss the Dis- and Advantages!
 6. Describe which impact the setting NULLIFY causes!