

Course A7B36DBS: **Database Systems**

Practice 07:

Schema Normalization

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Exercise 1

- Normalize the following relational schema using the **Decomposition algorithm**
 - Attributes: {B, C, D, E}
 - Dependencies: {BC \rightarrow DE, DE \rightarrow B, CE \rightarrow B}

Exercise 2

- Normalize the following relational schema using the **Decomposition algorithm**
 - $\{A, B, C, D, E\}$
 - $\{B \rightarrow E, AB \rightarrow D, CD \rightarrow A, D \rightarrow B, A \rightarrow CE\}$

Exercise 3

- Normalize the following relational schema using the **Synthesis algorithm**
 - $\{A, B, C, D, E\}$
 - $\{A \rightarrow B, ABCD \rightarrow E, EF \rightarrow GH, ACDF \rightarrow EG\}$