<div align="center">

Normalization Steps
Database Normalization (art and science)
"Single-theme tables"

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All non-key attributes should depend upon the key, the whole key, and nothing but the key
1. depend upon the key: **define primary key, remove repeating groups/arrays (atomicity)**
2. the whole key: **remove partial dependencies (only if composite key)**
3. nothing but the key: **remove transitive dependencies** (no dependencies on non-key attributes)

1NF:
1. Identify PK
2. Eliminate repeating groups/arrays (<mark>atomicity: no multi-valued attributes, single fact at the intersection of each row and column</mark>)
Note: Identify dependencies for further normalization

2NF:
1. 1NF
2. remove partial dependencies
   a. identify key components
   b. assign dependent attributes

3NF:
1. 2NF
2. remove transitive dependencies
   a. identify determinant of transitive dependency (TD) as PK new table
   b. identify dependent attributes
   c. remove dependent atributes from TD, become nonkey attributes in new table

Note: During 1NF identify dependencies for further normalization