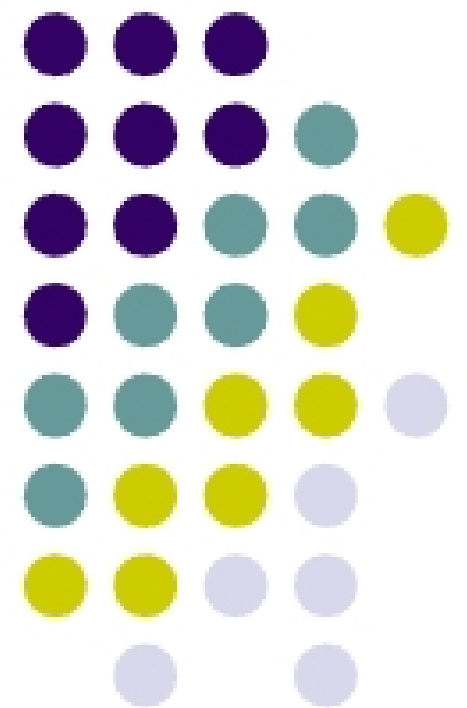


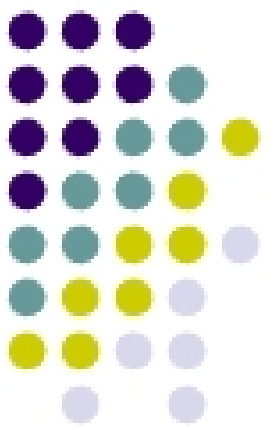
# CMSC424: Database Design

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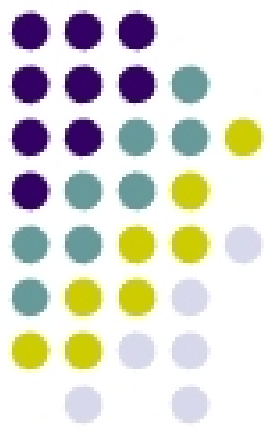


# Today...

- Project
- Relational Database Design



# Goal



- We want a mechanism for:
  - Deciding whether a relation  $R$  is in a “good form”
    - Has no redundancy etc...
  - If  $R$  is not in “good” form, **decompose** it into a set of relations  $\{R_1, R_2, \dots, R_n\}$  such that
    - Each relation is in good form
    - The decomposition is a *lossless-join* decomposition
    - Dependencies are *preserved (optional)*
      - All dependencies can be checked within a single relation