

Lecture Example and its answer

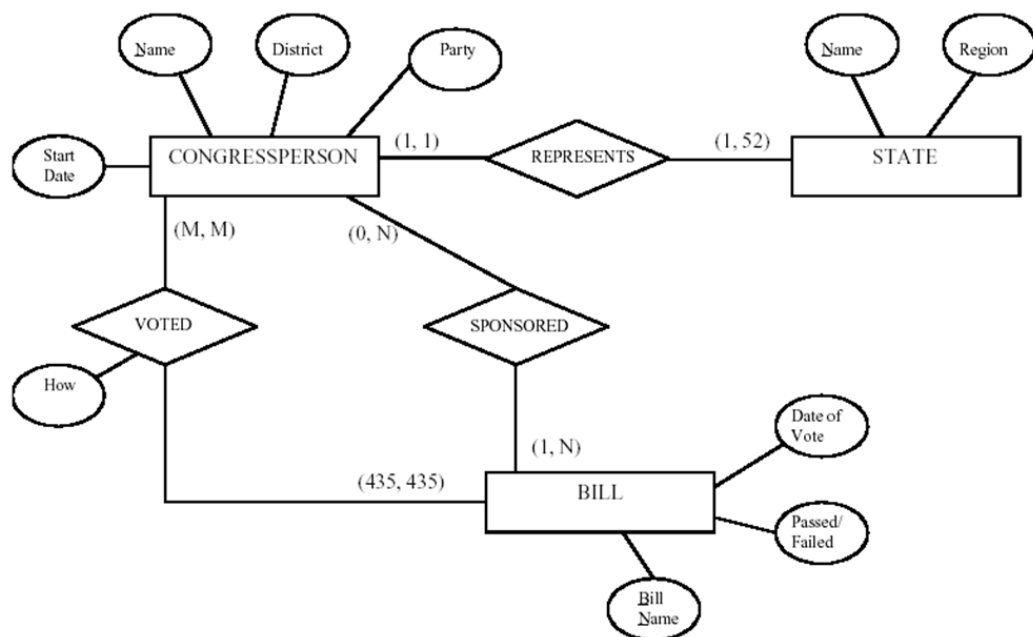
Ex. 7.21 page 235 U.S. House of Representatives

- Design an ER schema for keeping track of information about votes taken in the U.S. House of Representatives during the current two-year congressional session.

مجلس النواب الأمريكي خلال الدورة الحالية للكونغرس التي تستمر عامين.

- The database needs to keep track of each U.S. STATE's Name (e.g., 'Texas', 'New York', 'California') and include the Region of the state (whose domain is {'Northeast', 'Midwest', 'Southeast', 'Southwest', 'West'}).
- Each CONGRESS_PERSON in the House of Representatives is described by his or her Name, plus the District represented, the Start_date when the congressperson was first elected, and the political Party الحزب السياسي to which he or she belongs (whose domain is {'Republican', 'Democrat', 'Independent', 'Other'}).
- The database keeps track of each BILL (i.e., proposed law مشروع قانون), including the Bill_name, the Date_of_vote on the bill, whether the bill Passed_or_failed (whose domain is {'Yes', 'No'}), and the Sponsor (the congressperson(s) who sponsored—that is, proposed—the bill). أسماء النواب المقترحين لهذا القانون.
- The database also keeps track of how each congressperson voted on each bill (domain of Vote attribute is {'Yes', 'No', 'Abstain' امتناع, 'Absent'}).
- Draw an ER schema diagram for this application.
- State clearly any assumptions you make.

Answer)



Additional information:

- There are 435 congresspersons in the U.S. House of Representatives.
- States have between one (AK, DE, MT, ND, SD, VT, and WY) and 52 (CA) representatives.
- M represents number of bills during the 2-year session.