1. Entities:

Chamber of Congress, Party, Congress person, Bill, State, Senator, Representative

2. Chamber(<u>id</u>, name)

Term(bioguide_id, start, end, type, state, url, district, party, chamber)

 $District(\underline{number,state})$

State(name, num_districts)

Legislator(<u>bioguide_id</u>, Last Name, First Name, birthday, gender, wikipedia_id, govtrack_id, official_full_name)

Sponsors(Legislator_id,<u>Bill_id</u>)

Legislator_Vote(Vote_id, bioguide_id, how_voted)

Bill(<u>id</u>, type, title, popular_title, short_title, status, summary, congress, number)

Amendment(<u>id</u>, description, purpose, status, introduced_at, type, Bill_id,

Amendmant_id, congress, number)

Vote(<u>id</u>, chamber, category, question, congress, session, result, requires, number, date, type, Bill_id, Amendment_id)

Subject(subject, Bill_id)

Session(congress, type, begin, end)

Congress(id, begin, end)

3. minimal basis: there are no functional dependencies in our data, therefore the minimal set which forms a basis in each relation is just the key for

that relation: Chamber: <u>id</u> Term: bioguide_id,<u>start,end</u>

District: <u>number</u> State:name

Legislator: bioguide_id

Sponsors: <u>Legislator_id</u>, <u>Bill_id</u> Legislator_Vote: <u>Vote_id</u>, bioguide_id

Bill: id

Amendment: id

Vote: id

Subject: subject

Session: congress, type

Congress: id