I am trying to build a database to record elections in Australia. The database will record federal elections every 3 years in 151 electoral divisions. Here are the tables presented in schema form:

**Database schemas**

TESTelectionMaster (electionSerialNo, electionDate, electionType, totalNumDivisions, totalRegVoters, lastDateToVoterRegister, lastDateCandidateNominate, lastDateToDeclareResult)

TESTelectoralDivision (divisionName, totalRegVoters, currMember)

TESTelectoralDivisionHistory (divisionName\*, electionSerialNo\*, historicRegVoters)

TESTelectionEvent (electionEventID\*, totalVoters, votesCast, votesReject, votesValid, electionSerialNo\*, divisionName\*, candidatePrefWinnerCandidateID\*, winnerTally, candidatePrefLoserCandidateID\*, loserTally)

TESTcandidateList (candidateID, candidateName, contactAddress, contactPhone, contactMobile, contactEmail, partyCode\*)

TESTcontests (electionEventID\*\*, candidateID\*)

TESTpoliticalParty (partyCode,partyName, partyLogo, postalAddress, partySecretary, contactPersonName, contactPersonPhone, contactPersonMobile, contactPersonEmail)

TESTvoterRegistry (coterID, firstName, middleName, lastName, Address, dateOfBirth , gender, residentUnitNumber, residentStreetNumber, residentStreetName, residentsuburb, residentPostcode, residentState, postalUnitNumber, postalStreetNumber, postalStreetName, postalSuburb, postalPostcode, postalState, daytimePhone , mobile, emailAddress, divisionName\*)

TESTballot (ballotID, electionEventID\*\*)

TESTballotPreferences (ballotID\*, candidateID\*, preference)

TESTIssuanceRecord (voterID\*, electionEventID\*, issueDate, timestamp, pollingStation)

TESTprefCountRecord (electionEventID\*, roundNo, eliminatedCandidateID\*, countStatus, preferenceAggregate)

TESTpreferenceTallyPerRoundPerCandidate (electionEventID\*\*, roundNo\*, candidateID\*, preferenceTally)

Here are the constraints:

alter table TESTelectoralDivisionHistory add constraint TESTelectoralDivisionHistoryKeys

    FOREIGN KEY (divisionName)

        REFERENCES TESTelectoralDivision (divisionName),

    FOREIGN KEY (electionSerialNo)

        REFERENCES TESTelectionMaster (electionSerialNo);

alter table TESTcandidateList add constraint TESTcandidateListKeys

    FOREIGN KEY (partyCode)

        REFERENCES TESTpoliticalParty (partyCode);

alter table TESTvoterRegistry add constraint TESTvoterRegistryKeys

    FOREIGN KEY (divisionName)

        REFERENCES TESTelectoralDivision (divisionName);

alter table TESTcontests add constraint TESTcontestsKeys

    FOREIGN KEY (electionEventID)

        REFERENCES TESTelectionEvent (electionEventID),

    FOREIGN KEY (candidateID)

        REFERENCES TESTcandidateList (candidateID);

alter table TESTballot add constraint TESTballotKeys

    FOREIGN KEY (electionEventID)

        REFERENCES TESTelectionEvent (electionEventID);

alter table TESTballotPreferences add constraint TESTballotPreferencesKeys

    FOREIGN KEY (ballotID)

        REFERENCES TESTballot(ballotID),

    FOREIGN KEY (candidateID)

        REFERENCES TESTcandidateList (candidateID);

alter table TESTissuanceRecord add constraint TESTissuanceRecordKeys

    FOREIGN KEY (voterID)

        REFERENCES TESTvoterRegistry (voterID),

    FOREIGN KEY (electionEventID)

        REFERENCES TESTelectionEvent (electionEventID);

alter table TESTprefCountRecord add constraint TESTprefCountRecordKeys

    FOREIGN KEY (electionEventID)

        REFERENCES TESTelectionEvent (electionEventID),

    FOREIGN KEY (eliminatedCandidateID)

        REFERENCES TESTcandidateList (candidateID);

alter table TESTpreferenceTallyPerRoundPerCandidate add constraint TESTpreferenceTallyPerRoundPerCandidateKeys

    FOREIGN KEY (electionEventID)

        REFERENCES TESTelectionEvent (electionEventID),

    FOREIGN KEY (electionEventID, roundNo)

        REFERENCES TESTprefCountRecord (electionEventID, roundNo),

    FOREIGN KEY (candidateID)

        REFERENCES TESTcandidateList (candidateID);

alter table TESTelectionEvent add constraint TESTelectionEventKeys

    FOREIGN KEY (electionSerialNo)

        REFERENCES TESTelectionMaster (electionSerialNo),

    FOREIGN KEY (divisionName)

        REFERENCES TESTelectoralDivision (divisionName),

    FOREIGN KEY (prefWinnerCandidateID)

        REFERENCES TESTcandidateList (candidateID),

    FOREIGN KEY (prefLoserCandidateID)

        REFERENCES TESTcandidateList (candidateID);

I need to generate sample records for TESTelectoralDivision. We are going off the information provided in 2019. In Australia, the eligible voter population was 24,396,329 with 151 electoral divisions.

This can be broken down into the following; in NSW the population was 7,797,791 with 47 electoral divisions, in VIC the population was 6,244,227 47 with 38 electoral divisions, in QLD the population was 4,883,739 with 30 electoral divisions, in WA the population was 2,567,788 with 16 electoral divisions, in SA the population was 1,716,966 with 10 electoral divisions, in TAS the population was 519,050 with 5 electoral divisions, in ACT the population was 419,256 with 3 electoral divisions, in NT the population was 247,512 with 2 electoral divisions.

Let’s first start generating the records from NSW.