I am trying to build a database to record elections in Australia. 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 want to create insert values for TESTballotPreferences.

* Ballot ID’s represent voters (1000).
* The candidateID’s are: 13321, 17846, 17258, 20645,10268, 20553.
* Since there are 6 candidates there are 6 preferences.

The data was recorded in a CSV format like so:

|  |  |  |
| --- | --- | --- |
| 1 | 13321 | 3 |
| 1 | 17846 | 6 |
| 1 | 17258 | 5 |
| 1 | 20645 | 4 |
| 1 | 10268 | 1 |

Can you convert the data into the proper INSERT values. E.g.

INSERT INTO TESTballotPreferences (ballotID, candidateID, preference)

VALUES

(1, 13321, 3);

…

|  |  |  |
| --- | --- | --- |
| 31 | 13321 | 4 |
| 31 | 17846 | 6 |
| 31 | 17258 | 5 |
| 31 | 20645 | 3 |
| 31 | 10268 | 1 |
| 31 | 20553 | 2 |
| 32 | 13321 | 1 |
| 32 | 17846 | 4 |
| 32 | 17258 | 2 |
| 32 | 20645 | 6 |
| 32 | 10268 | 5 |
| 32 | 20553 | 3 |
| 33 | 13321 | 4 |
| 33 | 17846 | 1 |
| 33 | 17258 | 3 |
| 33 | 20645 | 2 |
| 33 | 10268 | 5 |
| 33 | 20553 | 6 |
| 34 | 13321 | 3 |
| 34 | 17846 | 6 |
| 34 | 17258 | 1 |
| 34 | 20645 | 5 |
| 34 | 10268 | 4 |
| 34 | 20553 | 2 |
| 35 | 13321 | 5 |
| 35 | 17846 | 3 |
| 35 | 17258 | 2 |
| 35 | 20645 | 6 |
| 35 | 10268 | 4 |
| 35 | 20553 | 1 |
| 36 | 13321 | 3 |
| 36 | 17846 | 6 |
| 36 | 17258 | 5 |
| 36 | 20645 | 4 |
| 36 | 10268 | 2 |
| 36 | 20553 | 1 |
| 37 | 13321 | 6 |
| 37 | 17846 | 1 |
| 37 | 17258 | 5 |
| 37 | 20645 | 4 |
| 37 | 10268 | 2 |
| 37 | 20553 | 3 |
| 38 | 13321 | 3 |
| 38 | 17846 | 6 |
| 38 | 17258 | 5 |
| 38 | 20645 | 4 |
| 38 | 10268 | 2 |
| 38 | 20553 | 1 |
| 39 | 13321 | 3 |
| 39 | 17846 | 5 |
| 39 | 17258 | 4 |
| 39 | 20645 | 2 |
| 39 | 10268 | 6 |
| 39 | 20553 | 1 |
| 40 | 13321 | 3 |
| 40 | 17846 | 6 |
| 40 | 17258 | 5 |
| 40 | 20645 | 4 |
| 40 | 10268 | 2 |
| 40 | 20553 | 1 |
| 41 | 13321 | 4 |
| 41 | 17846 | 3 |
| 41 | 17258 | 1 |
| 41 | 20645 | 6 |
| 41 | 10268 | 5 |
| 41 | 20553 | 2 |
| 42 | 13321 | 3 |
| 42 | 17846 | 6 |
| 42 | 17258 | 5 |
| 42 | 20645 | 4 |
| 42 | 10268 | 1 |
| 42 | 20553 | 2 |
| 43 | 13321 | 3 |
| 43 | 17846 | 6 |
| 43 | 17258 | 5 |
| 43 | 20645 | 4 |
| 43 | 10268 | 1 |
| 43 | 20553 | 2 |
| 44 | 13321 | 3 |
| 44 | 17846 | 6 |
| 44 | 17258 | 5 |
| 44 | 20645 | 4 |
| 44 | 10268 | 1 |
| 44 | 20553 | 2 |
| 45 | 13321 | 5 |
| 45 | 17846 | 2 |
| 45 | 17258 | 6 |
| 45 | 20645 | 3 |
| 45 | 10268 | 4 |
| 45 | 20553 | 1 |
| 46 | 13321 | 3 |
| 46 | 17846 | 2 |
| 46 | 17258 | 4 |
| 46 | 20645 | 5 |
| 46 | 10268 | 6 |
| 46 | 20553 | 1 |
| 47 | 13321 | 2 |
| 47 | 17846 | 1 |
| 47 | 17258 | 3 |
| 47 | 20645 | 4 |
| 47 | 10268 | 6 |
| 47 | 20553 | 5 |
| 48 | 13321 | 3 |
| 48 | 17846 | 6 |
| 48 | 17258 | 5 |
| 48 | 20645 | 4 |
| 48 | 10268 | 2 |
| 48 | 20553 | 1 |
| 49 | 13321 | 1 |
| 49 | 17846 | 2 |
| 49 | 17258 | 5 |
| 49 | 20645 | 6 |
| 49 | 10268 | 4 |
| 49 | 20553 | 3 |
| 50 | 13321 | 1 |
| 50 | 17846 | 3 |
| 50 | 17258 | 4 |
| 50 | 20645 | 2 |
| 50 | 10268 | 6 |
| 50 | 20553 | 5 |
| 51 | 13321 | 5 |
| 51 | 17846 | 6 |
| 51 | 17258 | 4 |
| 51 | 20645 | 2 |
| 51 | 10268 | 3 |
| 51 | 20553 | 1 |
| 52 | 13321 | 3 |
| 52 | 17846 | 6 |
| 52 | 17258 | 5 |
| 52 | 20645 | 4 |
| 52 | 10268 | 2 |
| 52 | 20553 | 1 |
| 53 | 13321 | 3 |
| 53 | 17846 | 6 |
| 53 | 17258 | 5 |
| 53 | 20645 | 4 |
| 53 | 10268 | 1 |
| 53 | 20553 | 2 |
| 54 | 13321 | 3 |
| 54 | 17846 | 1 |
| 54 | 17258 | 2 |
| 54 | 20645 | 6 |
| 54 | 10268 | 4 |
| 54 | 20553 | 5 |
| 55 | 13321 | 2 |
| 55 | 17846 | 6 |
| 55 | 17258 | 3 |
| 55 | 20645 | 1 |
| 55 | 10268 | 4 |
| 55 | 20553 | 5 |
| 56 | 13321 | 4 |
| 56 | 17846 | 1 |
| 56 | 17258 | 2 |
| 56 | 20645 | 5 |
| 56 | 10268 | 6 |
| 56 | 20553 | 3 |
| 57 | 13321 | 3 |
| 57 | 17846 | 1 |
| 57 | 17258 | 6 |
| 57 | 20645 | 5 |
| 57 | 10268 | 2 |
| 57 | 20553 | 4 |
| 58 | 13321 | 3 |
| 58 | 17846 | 6 |
| 58 | 17258 | 5 |
| 58 | 20645 | 4 |
| 58 | 10268 | 2 |
| 58 | 20553 | 1 |
| 59 | 13321 | 5 |
| 59 | 17846 | 6 |
| 59 | 17258 | 4 |
| 59 | 20645 | 2 |
| 59 | 10268 | 3 |
| 59 | 20553 | 1 |
| 60 | 13321 | 3 |
| 60 | 17846 | 6 |
| 60 | 17258 | 5 |
| 60 | 20645 | 4 |
| 60 | 10268 | 1 |
| 60 | 20553 | 2 |