Employee table

Unf

Employee{s.n.(p.k.), Employee\_name, DOB, Contact, {email},{address},Depid,Depname}

1NF

Employee{ s.n.(p.k.), Employee\_name, DOB, Contact, Depid, DepName}

Employee\_email{email, s.n.(f.k)}

Employee\_address{Address, AddressID, s.n.(f.k.)}

2NF

Employee{s.n.(p.k.), Employee\_name, DOB, Contact, Depid, DepName}

Employee\_email{email,s.n.(f.k.)}

Employee\_address{AddressID(pk), Address}

Employee\_address\_link{s.n.(f.k.),AddressID(f.k.)}

3NF

Department{Depid (p.k.), DepName}

Employee{s.n.(p.k.), Employee\_name, DOB, Contact, DepId(f.k.)}

Employee\_email{email,s.n.(f.k.)}

Employee\_address{AddressID(pk), Address}

Employee\_address\_link{s.n.(f.k.),AddressID(f.k.)}

Voting Table

Unf

Voting{Voterid, votername, {votingyear{votingmonth,candidateID, candidateName,candidate\_depid, candidate\_depname}}}

1NF

Voter{voterid(p.k), votername}

Vote{votingyear, votingmonth, voterid(f.k), candidateid, candidate name, candidate\_depid}

2NF

Here, In the above 1NF relation I did not have partial dependency, so the relation is itself in second normal form.

Same as 1 NF

Voter{voterid(p.k), votername}

Vote{votingyear, votingmonth, voterid(f.k), candidateid, candidate name, candidate\_depid}

3NF

Voter{voterid(p.k), votername}

candidate{candidateID(p.k.), candidateName}

Candidate\_department{candidatedep\_id (p.k), candidatedep\_name}

Vote{votingyear, votingmonth, voterid(f.k.), candidateId(f.k.), candidatedep\_id(f.k.)}

# Combine tables

# THIS IS A FINAL VIEW

Employee {EmployeeId (p.k.), Employee\_name, DOB, Contact,departmentid(fk)}

EmployeeRole {RoleId (p.k.), RoleName, jobid(f.k)}

EmployeeJob {JobId(p.k.), jobTitle}

Department {Depid(p.k.), DepName}

EmployeeEmail {EmailId(pk), Email, EmployeeId(f.k.)}

EmployeeAddress {AddressId(pk), Address, EmployeeId(f.k.)}

EmployeeHistory {EmployeeHistoryId(p.k.), EmployeeId(f.k.), Depid(f.k.), JobId(f.k.), StartDate, EndDate,status}

Voter {VoterId(p.k.), VoterName}

Candidate {CandidateId(p.k.), CandidateName, CandidateDepId(f.k.)}

Vote {VotingYear, VotingMonth, VoterId(f.k.), CandidateId(f.k.)}

Candidate\_Department {candidate DepartmentID(pk), Candidate Department name}