Schema

Rule 1: Strong entity E with attributes of E
Employer(*employer_id*, name, company_bonus, insurance_premium_contribution, 401k_company_match)

Employee(SSN, first_name, last_name, job_title, salary_type, performance, federal_tax_bracket, 401k_contribution (foreign key to 401k table), insurance_name(foreign key to benefits))

State(state_name, tax_rate)

Insurance(insurance_name, provider, type, premium_type_cost)

401k_plan(plan_name)

Attorney_plan(plane_name, attorney_firm, premium)

Rule 2:
Dependent(SSN, dependeent_SSN, name, relation)

Federal(SSN, year, tax_bracket_1, tax_bracket_2, tax_bracket_3, social_security, medicare, w2)

Bonus(SSN, year, bonus_amt)

Benefits(employer_id, benefits_id, insurance, 401k_plan, attorney_plan)

Rule 3:
None

Rule 4:
Done for state-employee in final schema
Done for employer-employee in final schema

Rule 5:
employer_state(employer_id, state_name)

Rule 6:

Rule 7:

<u>Final schema</u>

Employer(*employer_id*, name, company_bonus, insurance_premium_contribution, 401k_company_match)

Employee(<u>SSN</u>, first_name, last_name, job_title, salary_type, performance, federal_tax_bracket, 401k_contribution, state(FK), employer_id(FK))

State(<u>state_name</u>, tax_rate)

Insurance(<u>insurance_name</u>, provider, type, premium_type_cost)

401k_plan(plan_name)

Attorney_plan(<u>plane_name</u>, attorney_firm, premium)

Dependent(<u>SSN, dependeent_SSN</u>, name, relation)

Federal(<u>SSN, year</u>, tax_bracket_1, tax_bracket_2, tax_bracket_3, social_security, medicare, w2)

Bonus(<u>SSN, year</u>, bonus_amt)

Benefits(<u>employer_id, benefits_id</u>, insurance, 401k_plan, attorney_plan)

employer_state(<u>employer_id, state_name</u>)