LD Functional Dependencies:

- Company_id -> address_id, sub_industry_id, cname,cdesc,website
- Sub_industry_id -> industry_id, g_desc
- Industry_id -> industry_title
- Person_id -> address_id, first_name, last_name, email, gender, phone
- Address_id -> zip, street, city
- Job_id -> position_id, employeeMode, pay_type,pay_rate
- Position_id -> company_id, job_id, title, p_desc
- Skill_id -> title, s_desc, s_level
- Person_id, job_id -> duration_id, start_date, end_date
- Section_id, Course_id -> s_year, c_date, offering_date, s_format, price, c_title, c_level, c_desc, status
- Section_id -> s_year, c_date, offering_date, s_format, price
- Course_id -> c_title, c_level, c_desc, status, req_course_id
- Pay_rate -> pay_type, hourly, annual
- Pay_type -> wage, salary

3NF

- COMPANY(Company_id, cname,cdesc,website)
- ADDRESS(address_id, zip, street, city)
- SUB_INDUSTRY(sub_industry_id, g_desc)
- INDUSTRY(industry_id, industry_title)
- PERSON(person_id,first_name,last_name,email,gender,phone)
- JPOSITION(position_id, title, p_desc)
- JOB(job_id, employee_mode)
- PAY_RATE(pay_rate_id, value)
- PAY_TYPE(pay_type_id, wage_salary)
- SKILL(skill_id, title, s_dec,s_level)
- SECTION(section_id, s_year, c_date, offering_date, s_format, price)
- COURSE(course_id, c_title, c_level, c_desc, status)
- PAY_TYPE_JOB(job_id, pay_type_id)
- PAY_TYPE_RATE(pay_type_id, pay_rate_id)
- COMPANY_ADDRESS(company_id, address_id)
- PERSON_ADDRESS(person_id, address_id)
- COMPANY_SUB_INDUSTRY(company_id, sub_industry_id)
- INDUSTRY_SUB_INDUSTRY(industry_id, sub_industry_id)
- POSITION_COMPANY(position_id, company_id)
- POSITION_JOB(position_id, job_id)
- PERSON_SKILL(person_id, skill_id)
- PERSON_JOB(person_id, job_id, start_date, end_date)
- PERSON_SECTION(person_id, section_id)

- SECTION_COURSE(section_id, course_id)
- SECTION_SKILL(section_id, skill_id)
- REQ_COURSE(course_id, req_course_id)

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AZ Functional Dependency

- storeID, address -> zipcode, phone
- ItemNum -> Quantity, MinLevel, ShelfCode, Unit, AvgCost, Title, Description
- PurchaseNbr -> Date, UnitCost, Note
- PuchaseNbr, ItemNbr -> Quantity
- InvoiceNbr -> Date, Price, Note, , MinLevel
- InvoiceNbr, ItemNbr -> Quantity
- CustomerID -> PuchaseNbr, ItemNbr
- SupplierID -> InvoiceNbr, ItemNbr

3rd Normal Form

- STORES(StoreID, Address, ZipCode, Phone)
- INVENTORY(ItemNum, Title, Description, Quantity, MinLevel, ShelfCode, Unit, AvgCost)
- SALE(InvoiceNbr, Date, Price, Note, MinLevel, Quantity)
- ITEM_SOLD(InvoiceNbr, ItemNbr)
- PURCHASE(PuchaseNbr, Date, UnitCost, Note, Quantity)
- ITEM_BOUGHT(PuchaseNbr, ItemNbr)
- CUSTOMER(CustomerID, PuchaseNbr)
- SUPPLIER(SupplierID, InvoiceNbr)

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GV Function Dependency

- FactoryID, FactoryName -> Address, ZipCode, Phone, Manager
- ProductCode -> Quantity, Unit, AverageCost, ProductName, Description
- ContractID -> Date, PaySchedule, ProductCode, Quantity
- CompanyID -> ContactPerson , ContactEmail, CustomerID, SaleAmount
- MaterialCode -> Quantity, Unit, MaterialName, MinLevel
- PurchaseNum -> BookDate, PayDate, Note, MaterialCode, Quantity, SupplierID ,SupplierOrderNum
- CompanyID -> Website, ContactEmail

3rd Normal Form

- FACTORY(FactoryID, FactoryName, Address, ZipCode, Manager)
- MATERIAL(MaterialCode, MaterialName, Unit, MinLevel, Quantity)
- PRODUCT(ProductCode, ProductName, Description, Unit, AverageCost, Quantity)

- CONTRACT(ContractID, Date, PaySchedule, SaleAmount)
- CONTRACT_SALE(ContractID, CustomerID)
- PURCHASE(PurchaseNum, BookDate, PayDate, Note, SupplierOrderNum)
- PURCHASE_INFO(PurchaseNum, SupplierID)
- SUPPLIER(CompanyID, Website, ContactEmail)
- CUSTOMER(CompanyID, ContactPerson, ContactEmail)
- LINEITEM(ConctractID, ProductCode)
- PURCHASELINE(PurchaseNum, MaterialCode)
- MAKES(FactoryID, ProductCode)