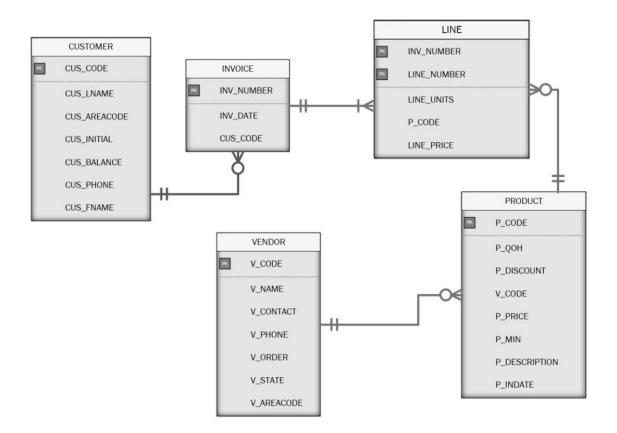
## **Assignment 4:**

Module 4. Assignment 1: Creating Relations in 3NF from an Entity Relationship Diagram (ERD)

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- 1. Identify all partial dependencies
  - LINE (LINE\_UNIT, LINE\_PRICE)
- 2. Identify all transitive dependencies.
  - CUSTOMER (CUS\_AREACODE)
  - VENDOR (V\_AREACODE)
  - PRODUCT (P\_DISCOUNT)
- 3. List the relations from the 3NF Crow's Foot ERD below.
  - Customer table relate to Invoice table as a foreign key (1:M) 1 mandatory to many optional
  - Invoice table relates to Line table as both foreign and primary key inv\_number of line table
    (1: M) 1 to Many 1 mandatory to many mandatory

- **Product** table relate to **Line** table as foreign key *p\_code* to that table (1:M) 1 to Many <u>1</u> mandatory to many optional
- Vendor relate to the product table as foreign key v\_code (1:M) 1 to Many <u>1 mandatory to many optional</u>
- 4. List the primary keys and the foreign keys associated with the different relations.
  - CUSTOMER
    - i. CUS\_CODE: PK
  - INVOICE
    - i. INV\_NUMBER: PK
    - ii. CUS\_CODE: FK
  - LINE
    - i. INV\_NUMBER: PK
    - ii. LINE\_NUMBER: PK
    - iii. P\_CODE: FK
  - PRODUCT
    - i. P\_CODE: PK
    - ii. V\_CODE: FK
  - VENDOR
    - i. V\_CODE: PK