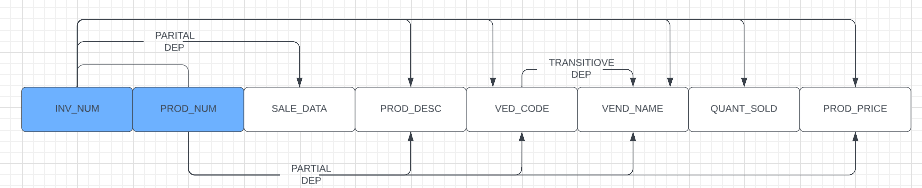
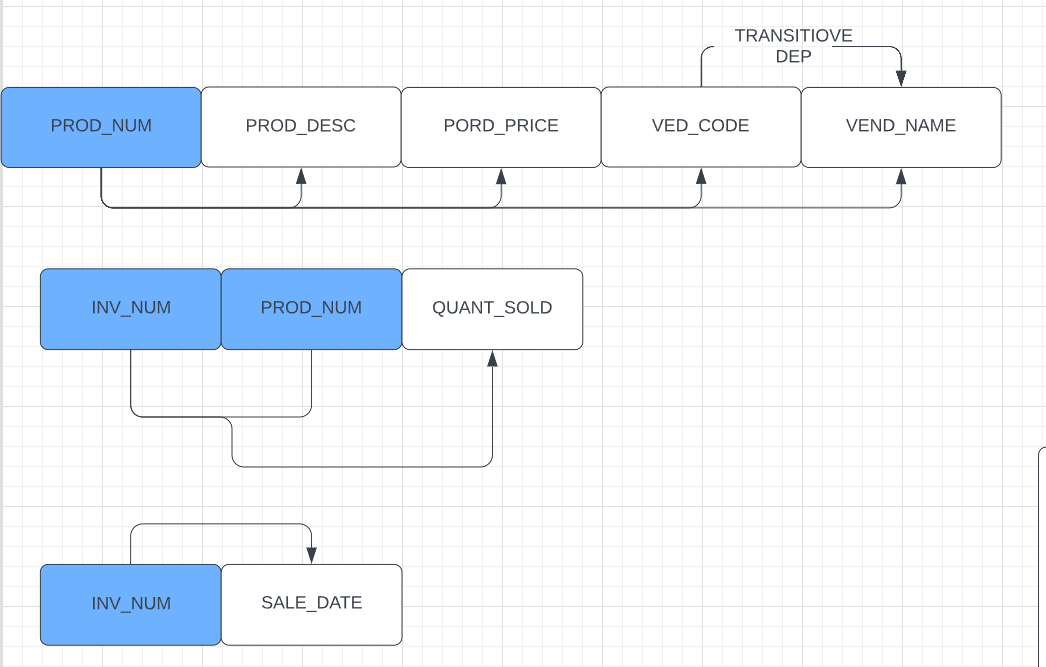
**SIT103/SIT772: Database Fundamentals**

**4.1P: Normalisation**

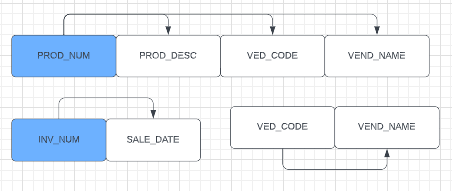
Q1



Q2



Q3



Q4

The invoice table satisfies the condition of 1NF because INV\_NUM and PROD\_NUM are used as PK and each record has a unique value and the duplicate group has been removed.

The (PROD\_NUM, PROD\_DESCRIPTION, VEND\_CODE, VEND\_NAME, PROD\_PRICE) satisfies the conditions of 2NF, which satisfies 2NF because it satisfies 1NF and there are no more partial dependencies, but still have transitive dependencies.

The (INV\_NUM, PROD\_NUM, QUANT\_SOLD)

(INV\_NUM, SALE\_DATE)

(VEND\_CODE, VEND\_NAME)

(PROD\_NUM, PROD\_DESCRIPTION, VEND\_CODE, PROD\_PRICE)

Are 3NFsatisfies the 3NF condition because its primary key (PK) is not part of either of the 1NF and 2NF primary keys.

Q5

