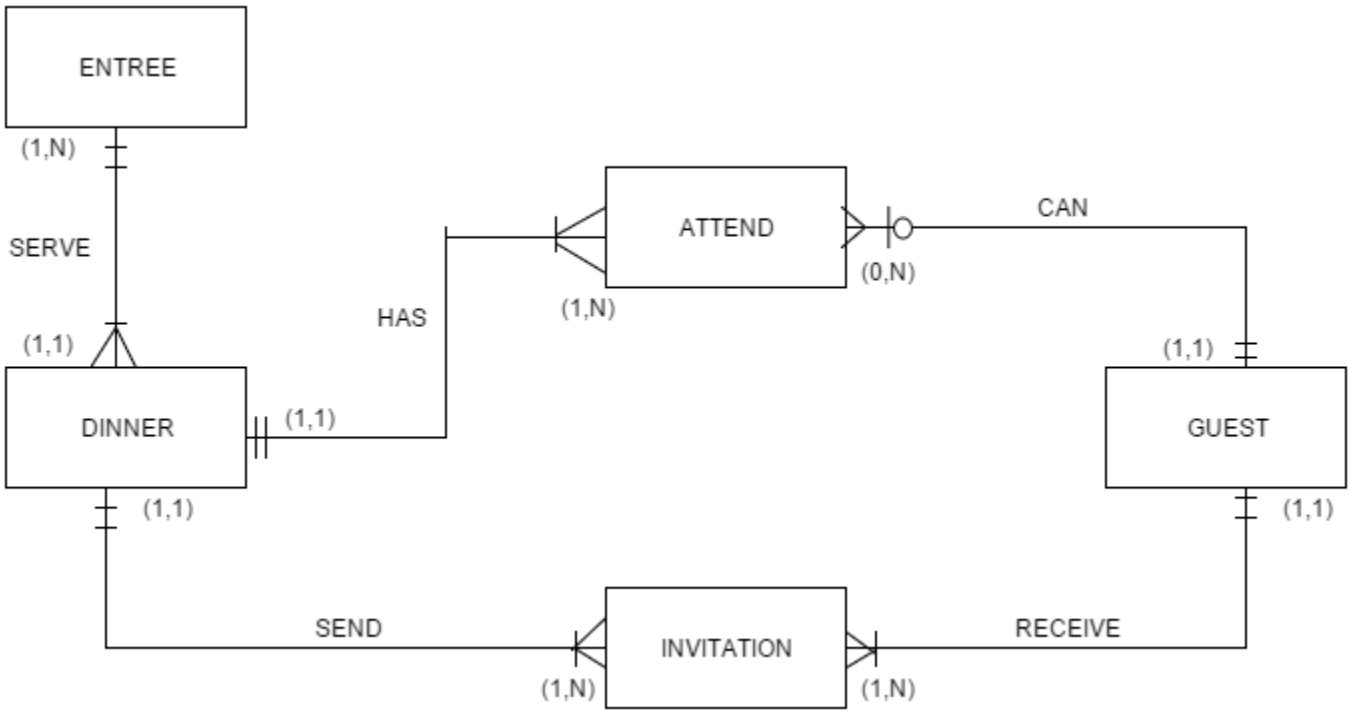
# Assignment IV
# DATABASE DESIGN Z511
# FNU ANIRUDH

## QUESTION 1

A multivalued attribute can be either broken down into multiple single-valued attributes or either it can be turned into a completely new entity having the original multivalued attribute's components.

## QUESTION 2




## QUESTION 3

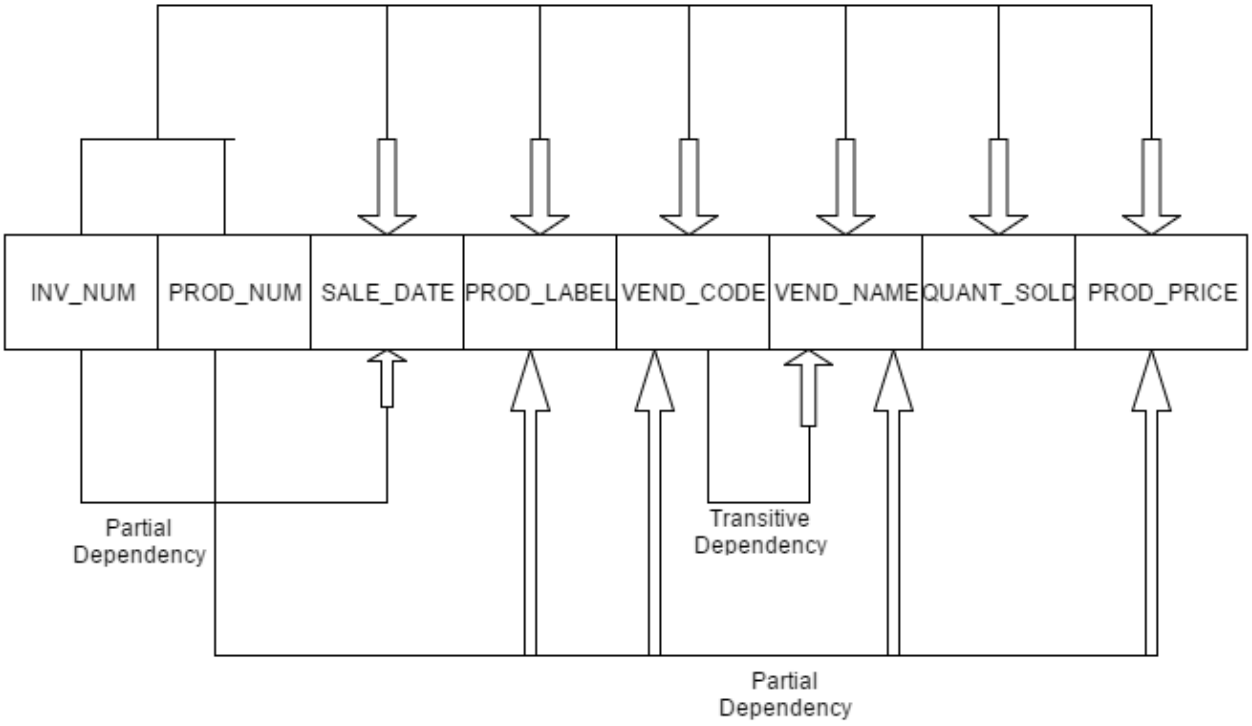
1NF (**INV_NUM, PROD_NUM**, SALE_DATE, PROD_LABEL, VEND_CODE, VEND_NAME, QUANT_SOLID, PROD_PRICE)

**PARTIAL DEPENDENCIES:**

(INV_NUM → SALE_DATE)
(PROD_NUM → PROD_LABEL, PROD_PRICE, VEND_CODE, VEND_NAME)

**TRANSITIVE DEPENDENCIES:**

(VEND_CODE → VEND_NAME)




**QUESTION 4**

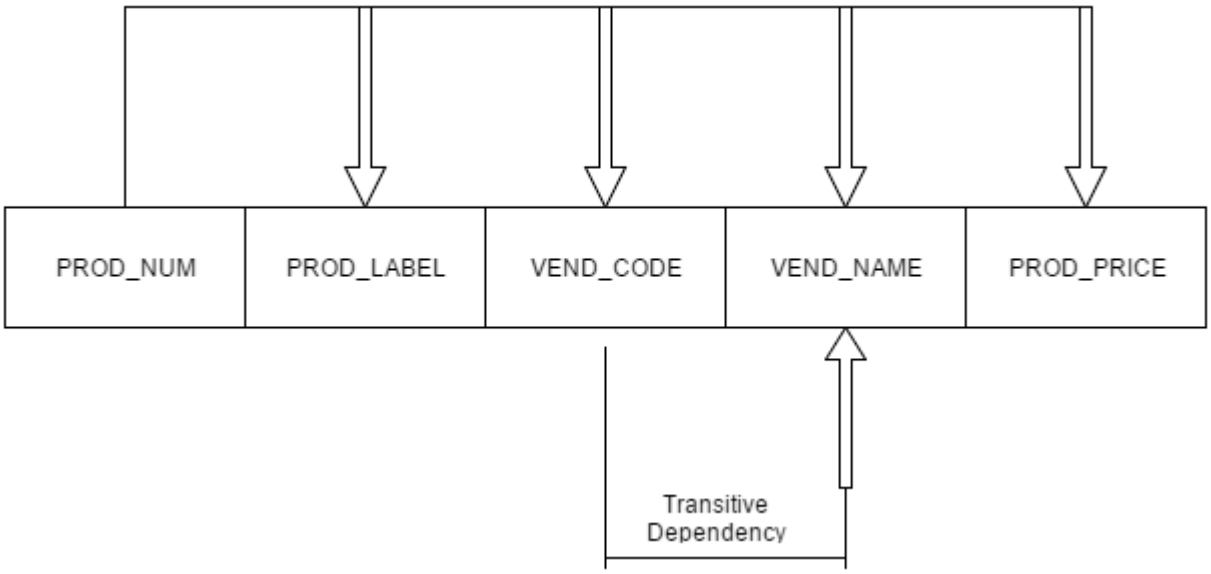


**Table Name: PRODUCT**
PRODUCT (**PROD_NUM**, PROD_LABEL, VEND_CODE, VEND_NAME, PROD_PRICE)

**TRANSITIVE DEPENDENCIES:**

(VEND_CODE →VEND_NAME)

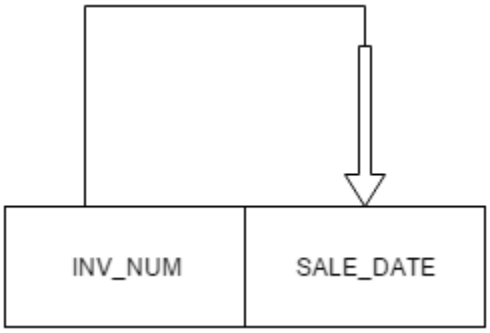



**Table Name: SALE**
SALE (**INV_NUM**, SALE_DATE)

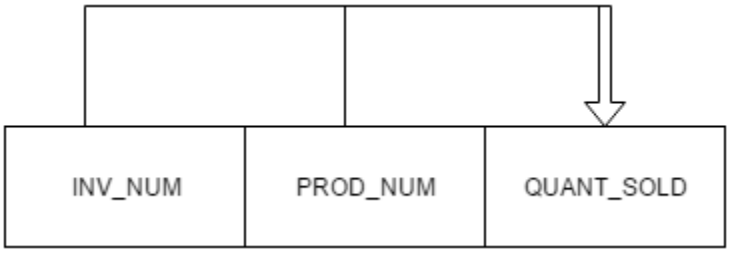



**TABLE NAME: INVOICE**

INVOICE (**INV_NUM, PROD_NUM**, QUANT_SOLD)

## QUESTION 5

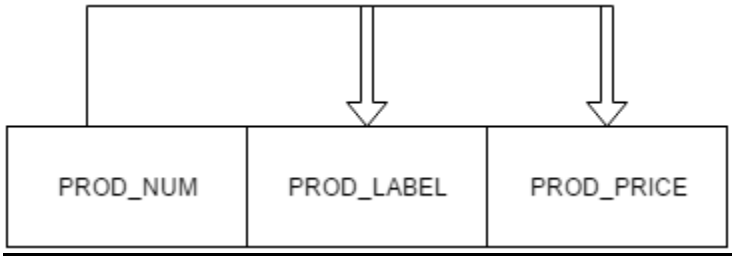


**Table Name: PRODUCT**

PRODUCT (**PROD_NAME**, PROD_LABEL, PROD_PRICE)

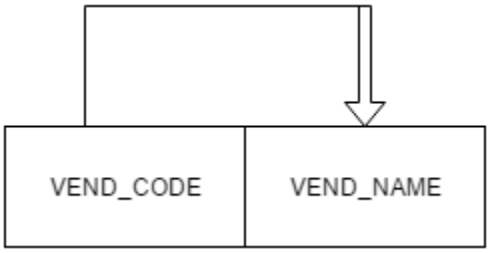



**Table Name: VENDOR**

VENDOR (**VEND_CODE**, VEND_NAME)

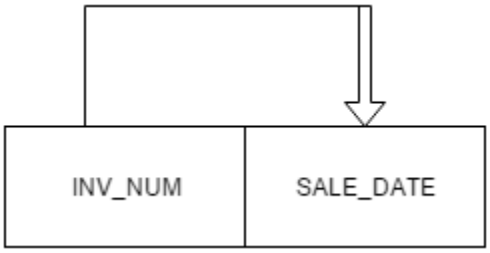



**Table Name: SALE**

SALE (**INV_NUM**, SALE_DATE)

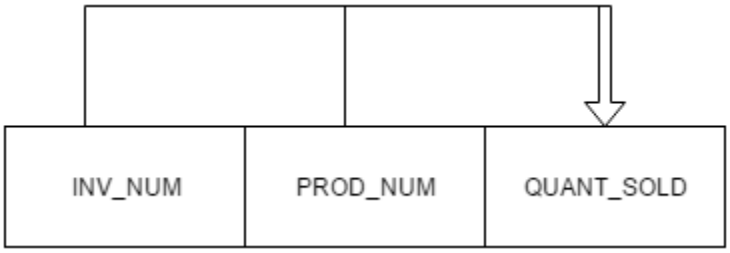
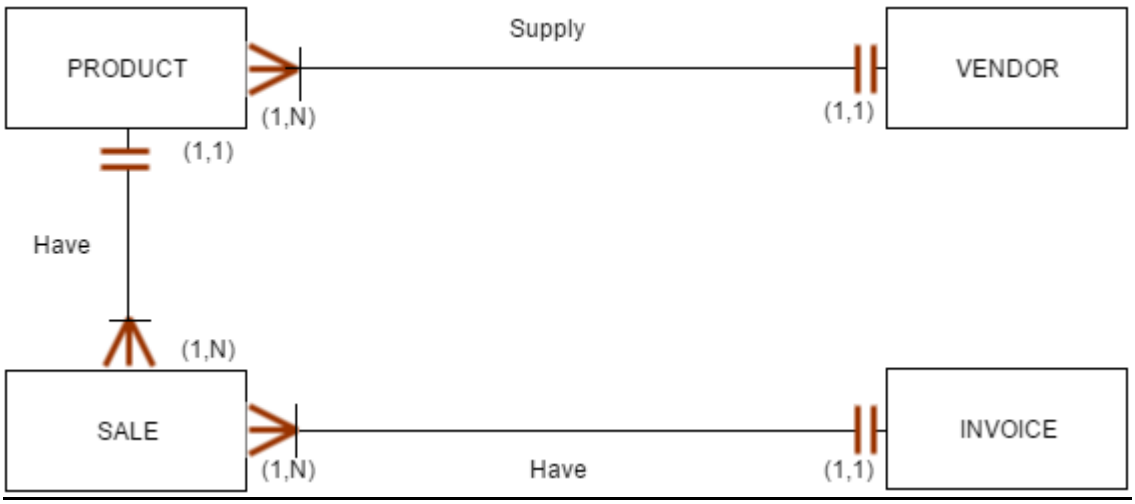



**Table Name: INVOICE**

INVOICE (**INV_NUM**, **PROD_NUM**, QUANT_SOLD)

## QUESTION 6


PRODUCT
Supply
VENDOR
(1,N)
(1,1)
(1,1)
Have
(1,N)
SALE
INVOICE
(1,N)
Have
(1,1)