

Functional dependency:

1. regNo → VIN, make, model, yearManufacture, sellingPrice (partial dependency)
2. paymentID → paymentDate, paymentTime, paymentAmount, paymentType (partial dependency)
3. customerNo → customerName, address, emailAddress, mobileNumber (transitive dependency)

UNF

Sale (saleNumber, saleDate, saleTime, salePerson, saleAmount, amountDue, customerNo, customerName, address, emailAddress, mobileNumber, (regNo, VIN, make, model, yearManufacture, sellingPrice), (paymentID, paymentDate, paymentTime, paymentAmount, paymentType))

1NF

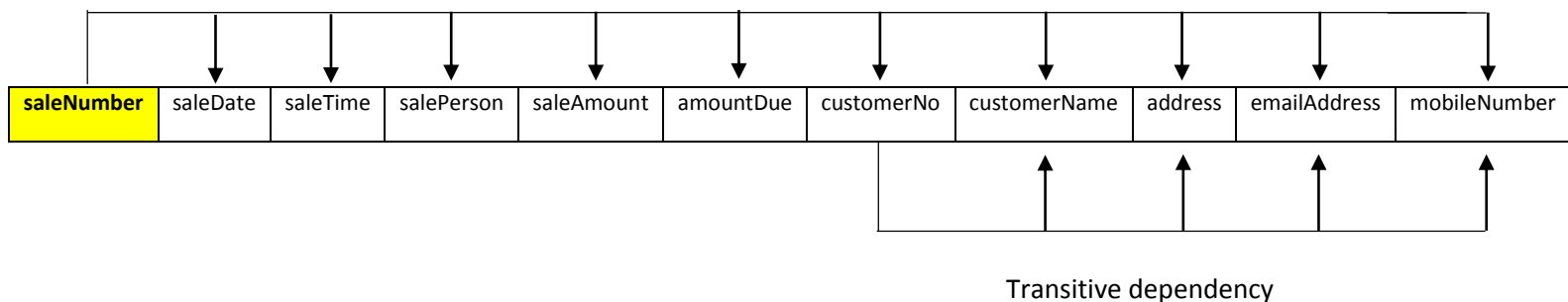
Sale (saleNumber, saleDate, saleTime, salePerson, saleAmount, amountDue, customerNo, customerName, address, emailAddress, mobileNumber)

Vehicle (saleNumber, regNo, VIN, make, model, yearManufacture, sellingPrice)

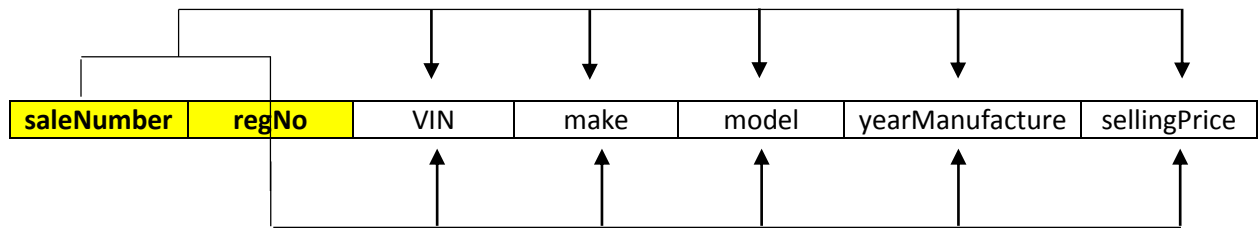
Payment (saleNumber, paymentID, paymentDate, paymentTime, paymentAmount, paymentType)

Dependency diagram:

Sale

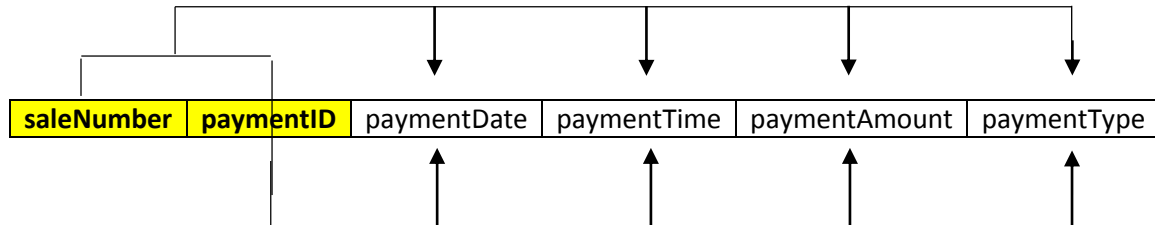


Vehicle



Partial dependency

Payment



Partial dependency

2NF

Sale (saleNumber, saleDate, saleTime, salePerson, saleAmount, amountDue, customerNo, customerName, address, emailAddress, mobileNumber)

Sale_Vehicle (saleNumber, regNo)

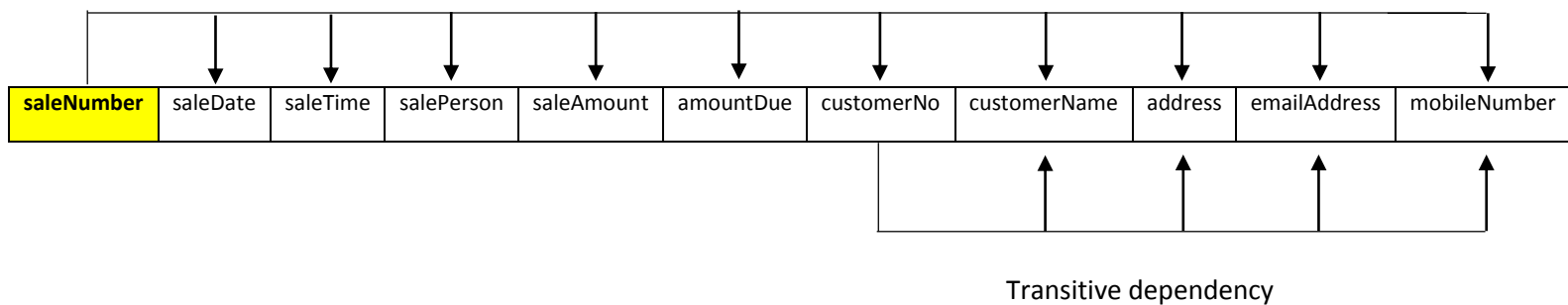
Vehicle (regNo, VIN, make, model, yearManufacture, sellingPrice)

Sale_Payment (saleNumber, paymentID)

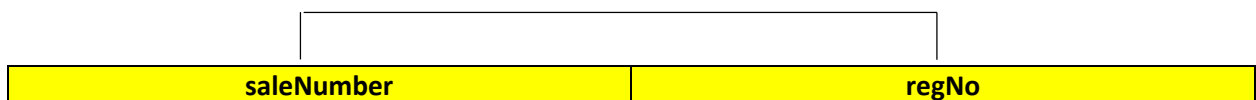
Payment (paymentID, paymentDate, paymentTime, paymentAmount, paymentType)

Dependency diagram:

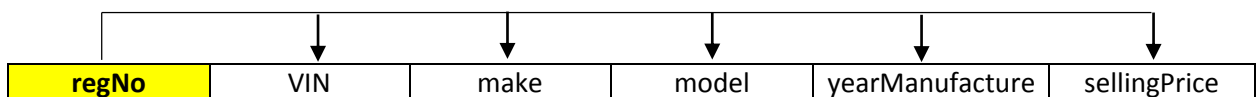
Sale



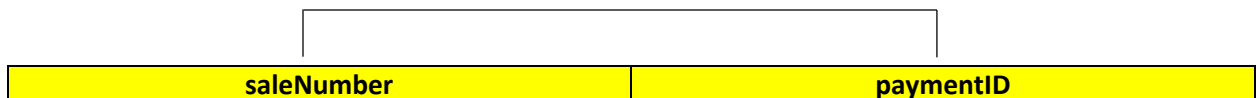
Sale_Vehicle



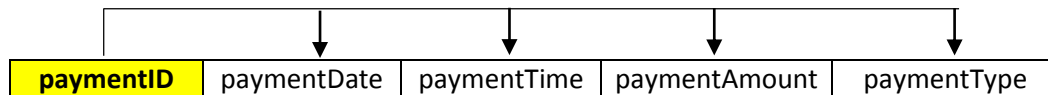
Vehicle



Sale_Payment



Payment



3NF

Sale (saleNumber, saleDate, saleTime, salePerson, saleAmount, amountDue, customerNo)

Sale_Vehicle (saleNumber, regNo)

Vehicle (regNo, VIN, make, model, yearManufacture, sellingPrice)

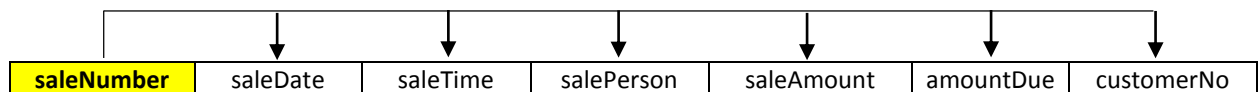
Sale_Payment (saleNumber, paymentID)

Payment (paymentID, paymentDate, paymentTime, paymentAmount, paymentType)

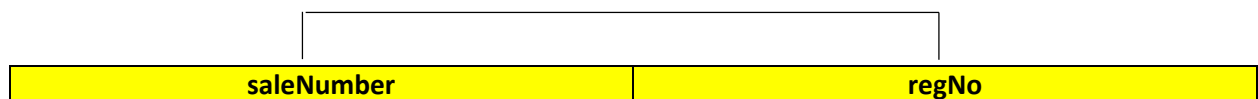
Customer (customerNo, customerName, address, emailAddress, mobileNumber)

Dependency diagram:

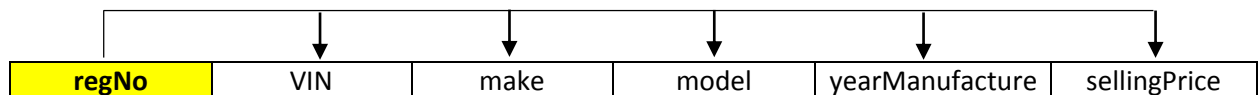
Sale



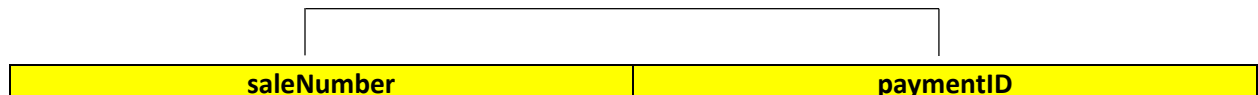
Sale_Vehicle



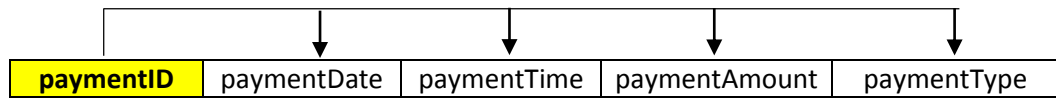
Vehicle



Sale_Payment



Payment



Customer

