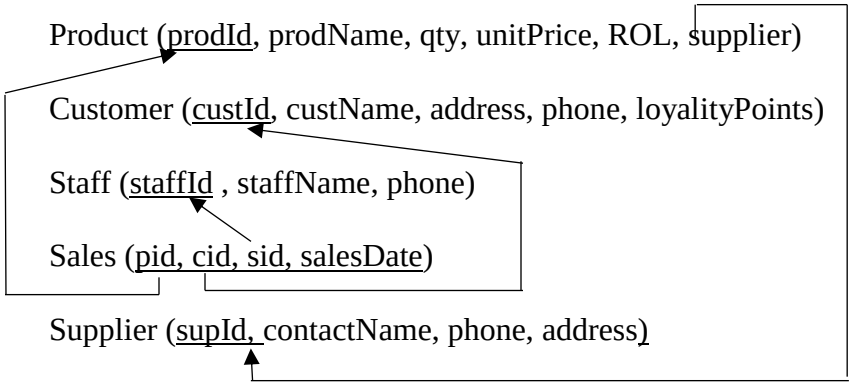
Database Management Systems

Year 2, Semester 1

Lab Sheet 03

Question 1

Implement the following relational schema for a super market in SQL Server.



Ensure that,

- quantity of a product is always greater than 0
- default date for a sale is the system date

Following data should be inserted to the tables.

Product

ProdId	prodName	qty	unitPrice	ROL	Supplier
P0001	Lemon Puff	22	85	20	1
P0201	Knor Soup	8	100	10	2
P0084	Lipton Ceylonta	12	125	15	2
P0222	chocolate fingers	14	50	8	1

Sales

pid	cid	sid	salesDate
P0201	C100	S001	13/11/2015
P0222	C101	S002	22/11/2015
P0084	C100	S001	01/12/2015
P0201	C100	S002	08/12/2015

Customer

custId	custName	address	phone	Points
C100	Ravi Perera	Colombo	0112123456	1200
C101	Nimali Alwis	Gampaha	0332212345	275

Staff

staffId	*name*	*phone*
S001	*Kamal Silva*	*0718123456*
S002	*Amila Namal*	*0714222222*

Supplier

supId	contactName	contactName	address	phone
1	Ceylon Biscuits	Amal Ranjith	Ratmalana	0112111111
2	Unilvers	Nadeeka Perera	Borella	0114555666

Question 2

Implement the Bank schema in question 1 of Lab sheet 2 in SQL Server.

- Ensure that the interest_rate of Savings account is a non-negative number (>= 0).
- Ensure that the customer's PIN number is a four digit (0-9) number
- Ensure that the customer's NIC number contains 10 digits
- Ensure that the customer's name is not null.
- Ensure that the balance in an account is always non-negative number (>= 0).
- In the Transaction table, the default value for date&time should be the system datetime.
- In the Transaction table, the value for by attribute must be one of the following: "ATM", "Teller", "Bank", "Standing Order", "Cheque", "On-Line" or "Other".
- The type descriptive attribute of the "has" relationship between Transaction table and Account table should have one of the following values: "credit" or "debit".

Insert at least two tuples into each table you created.