

Relation: Department

Attribute: Dcode
Attribute: Dname
Primary Key: Dcode

Domain: alpha [4]
Domain: alpha [20]

Relation: Retail

Attribute: Dcode
Attribute: Dname
Primary key: Dcode
Foreign key: Dcode

Domain: alpha [4]
Domain: alpha [20]

References: attribute Dcode in relation Department

Relation: Administrative

Attribute: Dcode
Attribute: Dname
Primary key: Dcode
Foreign key: Dcode

Domain: alpha [4]
Domain: alpha [20]

References: attribute Dcode in relation Department

Relation: Employee

Attribute: EID
Attribute: Ename
Attribute: Skills
Attribute: Dcode
Attribute: ManagerID
Primary key: EID
Foreign key: Dcode
Foreign key: ManagerID

Domain: alpha [4]
Domain: alpha [20]
Domain: alpha [30]
Domain: alpha [4] NOT NULL
Domain: alpha [4]

References: attribute Dcode in Department
References: attribute Dcode in Administrative

Relation: Items

Attribute: INumber
Attribute: Iname
Attribute: Description
Attribute: Price
Attribute: Quantity
Attribute: Shipping
Attribute: Dcode
Primary key: INumber
Foreign key: Dcode

Domain: alpha [4]
Domain: alpha [30]
Domain: alpha [150]
Domain: X is real number and $X \geq 0$
Domain: integer $X \geq 0$
Domain: X is real number and $X \geq 0$
Domain: alpha [4] NOT NULL

References: attribute Dcode in relation Retail

Relation: Customers

Attribute: CID
Attribute: Cname
Attribute: Address

Domain: alpha [4]
Domain: alpha [30]
Domain: char[50]

Primary key: CID

Relation: Creditcards

Attribute: Number	Domain: digit [16]
Attribute: Type	Domain: alpha [10]
Attribute: Exp	Domain: digit [6]
Attribute: Limit	Domain: real number $X \geq 0$
Primary key: Number	

Relation: CardOwner

Attribute: CID	Domain: alpha [4]
Attribute: CardNumber	Domain: digit [16]
Primary key: CID, CardNumber	
Foreign key: CID	References: attribute CID in relation Customers
Foreign key: CardNumber	References: attribute Number in relation Creditcards

Relation: Purchase

Attribute: INumber	Domain: alpha [4]
Attribute: CID	Domain: alpha [4]
Attribute: CardNumber	Domain: digit [16]
Attribute: Date	Domain: digit [6]
Attribute: Quantity	Domain: integer $x \geq 0$
Primary key: CID, INumber, CardNumber, Date	
Foreign key: CID, CardNumber	References: attribute (CID, CardNumber) in relation CardOwner
Foreign key: INumber	References: attribute INumber in relation Items

Relation: Supplier

Attribute: SID	Domain: alpha [4]
Attribute: Sname	Domain: alpha [20]
Attribute: Location	Domain: alpha [30]
Primary key: SID	

Relation: Supply

Attribute: Cost	Domain: real number $x \geq 0$
Attribute: SID	Domain: alpha [4]
Attribute: INumber	Domain: alpha [4]
Primary key: SID, INumber	
Foreign key: SID	References: attribute SID in relation Supplier
Foreign key: INumber	References: attribute INumber in relation Items

Relation: Procurement

Attribute: INumber	Domain: alpha [4]
Attribute: Date	Domain: digit [6]
Attribute: Quantity	Domain: integer $x \geq 0$

Attribute: TransactionNum
Primary key: TransactionNum
Foreign key: INumber

Domain: alpha [4]

References: attribute INumber in relation Items