**Relation: Department**

Attribute: Dcode Domain: alpha [4]

Attribute: Dname Domain: alpha [20]

Primary Key: Dcode

**Relation: Retail**

Attribute: Dcode Domain: alpha [4]

Attribute: Dname Domain: alpha [20]

Primary key: Dcode

Foreign key: Dcode References: attribute Dcode in relation Department

**Relation: Administrative**

Attribute: Dcode Domain: alpha [4]

Attribute: Dname Domain: alpha [20]

Primary key: Dcode

Foreign key: Dcode References: attribute Dcode in relation Department

**Relation: Employee**

Attribute: EID Domain: alpha [4]

Attribute: Ename Domain: alpha [20]

Attribute: Skills Domain: alpha [30]

Attribute: Dcode Domain: alpha [4] NOT NULL

Attribute: ManagerID Domain: alpha [4]

Primary key: EID

Foreign key: Dcode References: attribute Dcode in Department

Foreign key: ManagerID References: attribute Dcode in Administrative

**Relation: Items**

Attribute: INumber Domain: alpha [4]

Attribute: Iname Domain: alpha [30]

Attribute: Description Domain: alpha [150]

Attribute: Price Domain: X is real number and X >=0

Attribute: Quantity Domain: integer X >= 0

Attribute: Shipping Domain: X is real number and X>= 0

Attribute: Dcode Domain: alpha [4] NOT NULL

Primary key: INumber

Foreign key: Dcode References: attribute Dcode in relation Retail

**Relation: Customers**

Attribute: CID Domain: alpha [4]

Attribute: Cname Domian: alpha [30]

Attribute: Address 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 >= 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 >=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>=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 >=0

Attribute: TransactionNum Domain: alpha [4]

Primary key: TransactionNum

Foreign key: INumber References: attribute INumber in relation Items