

Relation: Department

Attribute: DepCode Domain: alpha[4]
Attribute: DepName Domain: alpha[20]
~~Attribute: Type Domain: {'Retail', 'Administrative'} NOT NULL~~
Primary key: DepCode

Relation: Administrative

Attribute: DepCode Domain: alpha[4]
Attribute: DepName Domain: alpha[20]
Primary key: DepCode
Foreign key: DepCode References: attribute DepCode in relation Department

Relation: Retail

Attribute: DepCode Domain: alpha[4]
Attribute: DepName Domain: alpha[20]
Primary key: DepCode
Foreign key: DepCode References: attribute DepCode in relation Department

Relation: Employee

Attribute: EmID Domain: digit[6]
Attribute: EmName Domain: alpha[30]
Attribute: Skill Domain: alpha[30]
Attribute: Assign_DepCode Domain: alpha[4] NOT NULL
Attribute: Manage_DepCode Domain: alpha[4]
Primary key: EmID, Skill
Foreign key: Assign_DepCode References: attribute DepCode in relation Department
Foreign key: Manage_DepCode References: attribute DepCode in relation Administrative

Relation: Items

Attribute: ItemNumber Domain: digit[6]
Attribute: ItemName Domain: alpha[30]
Attribute: Description Domain: alpha[120]
Attribute: Price Domain: $X = \{x \mid x \text{ is Real Number} \ \& \ x \geq 0\}$
Attribute: Quantity Domain: $X = \{x \mid x \text{ is integer} \ \& \ x \geq 0\}$
Attribute: ShippingCost Domain: $X = \{x \mid x \text{ is Real Number} \ \& \ x \geq 0\}$
Attribute: Retail_DepCode Domain: alpha[4] NOT NULL
Primary key: ItemNumber
Foreign key: Retail_DepCode References: attribute DepCode in relation Retail

Relation: Supplier

Attribute: SupCode Domain: digit[6]
Attribute: SupName Domain: alpha[30]
Attribute: Location Domain: alpha[30]
Primary key: SupCode

Relation: canSupply

Attribute: Cost	Domain: $X = \{x \mid x \text{ is Real Number} \ \& \ x \geq 0\}$
Attribute: SupCode	Domain: digit[6]
Attribute: ItemNum	Domain: digit[6]
Primary key: SupCode, ItemNum	
Foreign key: SupCode	References: attribute SupCode in relation Supplier
Foreign key: ItemNum	References: attribute ItemNum in relation Items

Relation: Procurement

Attribute: TransNum	Domain: digit[5]
Attribute: Date	Domain: char[20]
Attribute: Quantity	Domain: $X = \{x \mid x \text{ is integer} \ \& \ x \geq 0\}$
Attribute: SupCode	Domain: digit[6]
Attribute: ItemNum	Domain: digit[6]
Primary key: TransNum, SupCode, ItemNum	
Foreign key: SupCode	References: attribute SupCode in relation Supplier
Foreign key: ItemNum	References: attribute ItemNum in relation Items

Relation: Customer

Attribute: Name	Domain: alpha[30]
Attribute: CusID	Domain: digit[6]
Attribute: Address	Domain: char[50]
Primary key: CusID	

Relation: CreditCard

Attribute: Number	Domain: digit[20]
Attribute: Type	Domain: alpha[10]
Attribute: Expiration	Domain: digit[4]
Attribute: Limit	Domain: $X = \{x \mid x \text{ is Real Number} \ \& \ x \geq 0\}$
Primary key: Number	

Relation: CardOwner

Attribute: CusID	Domain: digit[6]
Attribute: CardNum	Domain: digit[20]
Primary key: CusID, CardNum	
Foreign key: CusID	References: attribute CusID in relation Customer
Foreign key: CardNum	References: attribute Number in relation CreditCard

Relation: Purchase

Attribute: ItemNum	Domain: digit[6]
Attribute: CusID	Domain: digit[6]
Attribute: Date	Domain: char[20]
Attribute: Quantity	Domain: $X = \{x \mid x \text{ is integer} \ \& \ x \geq 0\}$
Attribute: CardNum	Domain: digit[20]
Primary key: CardNum, CusID, Date	
Foreign key: CardNum	References: attribute Number in relation CreditCard
Foreign key: CusID	References: attribute CusID in relation Customer

Foreign Key: (CusID, CardNum) References: attribute (CusID, CardNum) in relation CardOwner

Foreign key: ItemNum References: attribute ItemNum in relation Items