

## Purchase-Order Relational Database

### Customer

**Relational Schema:** Customer(customer\_Id INT(5) , first\_name VARCHAR(50), last\_name VARCHAR (50), phone\_num VARCHAR (16), address VARCHAR (100), email VARCHAR(100))

**Primary Key:** customer\_Id

**Foreign Key:** None

**FD:**

customer\_Id → first\_name  
customer\_Id → last\_name  
customer\_Id → first\_name  
customer\_Id → phone\_num  
customer\_Id → address  
customer\_Id → email

### Payment

**Relational Schema:** Payment(payment\_Id INT(10), payment\_amount DECIMAL(6,2), payment\_type VARCHAR(50), customer\_Id INT(5), order\_number INT(10))

**Primary Key:** payment\_Id

**Foreign Key:** customer\_Id (NOT NULL), order\_number

**FD:**

payment\_Id → payment\_amount  
payment\_Id → payment\_type  
payment\_Id → customer\_Id  
payment\_Id → order\_number

### Order

**Relational Schema:** Order(order\_number INT (10), invoice\_amount DECIMAL(6,2), order\_date DATE, customer\_Id INT(5))

**Primary Key:** order\_number

**Foreign Key:** customer\_Id (NOT NULL)

**FD:**

order\_number → invoice\_amount  
order\_number → order\_date  
order\_number → customer\_Id

### OrderItem

**Relational Schema:** OrderItem(item\_Id INT(10), order\_number INT(10), product\_Id INT(10), quantity INT(10) , item\_price DECIMAL(6,2))

**Primary Key:** item\_Id, order\_number, product\_Id

**Foreign Key:** order\_number, product\_Id

**FD:**

item\_Id, order\_number, product\_Id → quantity  
Item\_Id, order\_number, product\_Id → item\_price

### **Product**

**Relational Schema:** Product(product\_Id INT(10), product\_name VARCHAR(200), description VARCHAR(500), product\_price DECIMAL(6,2), category\_Id INT(10))

**Primary Key:** product\_Id

**Foreign Key:** category\_Id

**FD:**

product\_Id → product\_name  
product\_Id → description  
product\_Id → product\_price  
product\_Id → category\_Id

### **ProductCategory**

**Relational Schema:** ProductCategory(category\_Id INT(10), category\_name VARCHAR(50))

**Primary Key:** category\_Id

**Foreign Key:** None

**FD:** category\_Id → category\_name