Customers

Contains a list of customers. One row per Customer. Would contain all the customer's information - their contact details, etc...

Orders

Contains a list of orders. One row per order. Each order is placed by a customer and has a Customer_ID - which can be used to link back to the customer record. Might also store the delivery address, if different from the customers address from their record - or store addresses in separate tables.

OrderItems

Contains a list of order items. One row for each item on an order - so each Order can generate multiple rows in this table. Each item ordered is a product from your inventory, so each row has a product_id, which links to the products table.

Products

Contains a list of products. One row per product. Similar to the customers table, but for products - contains all the product details.

Here's the SQL code that you could use to create this structure - it will create a database for itself called mydb:

```
CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET utf8 COLLATE utf8_general_ci ;

USE `mydb` ;


-- -----------------------------------------------------

-- Table `mydb`.`Customers`

-- -----------------------------------------------------

CREATE  TABLE IF NOT EXISTS `mydb`.`Customers` (

  `ID` INT NOT NULL ,

  `Name` TEXT NOT NULL ,

  `PhoneNo` VARCHAR(45) NULL ,
```

```
  PRIMARY KEY (`ID`) )
ENGINE = InnoDB;



-- -----------------------------------------------------
-- Table `mydb`.`Orders`
-- -----------------------------------------------------
CREATE  TABLE IF NOT EXISTS `mydb`.`Orders` (
  `ID` INT NOT NULL ,
  `customer_id` INT NULL ,
  PRIMARY KEY (`ID`) ,
  INDEX `fk_Order_1_idx` (`customer_id` ASC) ,
  CONSTRAINT `fk_Order_1`
    FOREIGN KEY (`customer_id` )
    REFERENCES `mydb`.`Customers` (`ID` )
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;



-- -----------------------------------------------------
-- Table `mydb`.`Products`
-- -----------------------------------------------------
CREATE  TABLE IF NOT EXISTS `mydb`.`Products` (
  `ID` INT NOT NULL ,
  `Name` VARCHAR(45) NOT NULL ,
  `Description` TEXT NULL ,
  PRIMARY KEY (`ID`) )
ENGINE = InnoDB;
```

```
-- -----------------------------------------------------
-- Table `mydb`.`OrderItems`
-- -----------------------------------------------------
CREATE  TABLE IF NOT EXISTS `mydb`.`OrderItems` (
  `ID` INT NOT NULL ,
  `Order_ID` INT NOT NULL ,
  `Product_ID` INT NOT NULL ,
  `Quantity` INT NOT NULL ,
  PRIMARY KEY (`ID`) ,
  INDEX `fk_OrderItem_1_idx` (`Order_ID` ASC) ,
  INDEX `fk_OrderItem_2_idx` (`Product_ID` ASC) ,
  CONSTRAINT `fk_OrderItem_1`
    FOREIGN KEY (`Order_ID` )
    REFERENCES `mydb`.`Orders` (`ID` )
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
  CONSTRAINT `fk_OrderItem_2`
    FOREIGN KEY (`Product_ID` )
    REFERENCES `mydb`.`Products` (`ID` )
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

USE `mydb` ;
```