

```

CREATE TABLE lookup(
    lookup_ID INT PRIMARY KEY AUTO_INCREMENT,
    category VARCHAR(50) NOT NULL,
    value VARCHAR(50) NOT NULL
);

CREATE TABLE customers(
    customer_ID Int Primary key Auto_Increment,
    customer_name varchar(250) Not null,
    customer_email varchar (100) Check (customer_email Like "%@%"),
    customer_contact varchar(20) Check(char_length(customer_contact)=11),
    customer_address varchar (250) not null
);

CREATE TABLE credentials(
    credential_ID int PRIMARY KEY AUTO_INCREMENT,
    username VARCHAR(50) NOT NULL,
    password_hash VARCHAR(255) NOT NULL,
    role_id INT,
    FOREIGN KEY (role_id) REFERENCES lookup(lookup_ID)
    ON DELETE SET NULL
    ON UPDATE CASCADE
);

CREATE TABLE staff(
    Staff_ID INT PRIMARY KEY AUTO_INCREMENT,
    Credential_ID INT NOT NULL,
    first_name VARCHAR(25) NOT NULL,
    last_name VARCHAR(25) NOT NULL,
    contact VARCHAR(20) NOT NULL,
    email VARCHAR(50) NOT NULL UNIQUE,
    FOREIGN KEY (credential_ID) REFERENCES credentials(credential_ID)
    ON UPDATE CASCADE
    ON DELETE CASCADE
);

CREATE TABLE product_categories(
    category_ID INT primary key Auto_Increment,
    category_name varchar (250) Not null,
    description TEXT
);

CREATE TABLE products (
    product_ID INT PRIMARY KEY AUTO_INCREMENT,
    product_name varchar(250) not null,
    weight decimal(10,2) check(weight>=0),
    size varchar(20) check(size>=0),
    category_ID int Not null,
    foreign key (category_ID) References product_categories(category_ID)
    On delete cascade
    on update cascade
);

CREATE TABLE warehouse (
    warehouse_ID Int Primary key Auto_Increment,
    warehouse_name varchar(250) Not null,

```

```
        warehouse_location varchar (250) not null ,
        capacity varchar (20) Check(capacity>=0)
    );
```

```
CREATE TABLE warehouse_stock(
    warehouseStock_ID INT PRIMARY KEY AUTO_INCREMENT,
    warehouse_ID INT NOT NULL,
    quantity INT NOT NULL CHECK (quantity>=0),
    product_ID INT NOT NULL,
    FOREIGN KEY(warehouse_ID) REFERENCES warehouse(warehouse_ID)
    ON UPDATE CASCADE
    ON DELETE CASCADE,
    FOREIGN KEY(product_ID) REFERENCES products(product_ID)
    ON UPDATE CASCADE
    ON DELETE CASCADE
);
```

```
CREATE TABLE shop_stock(
    shopStock_ID INT PRIMARY KEY AUTO_INCREMENT,
    quantity INT NOT NULL CHECK (quantity>=0),
    product_ID INT NOT NULL,
    FOREIGN KEY(product_ID) REFERENCES products(product_ID)

    ON UPDATE CASCADE
    ON DELETE CASCADE
);
```

```
CREATE TABLE stock_transfer(
    stockTransfer_id INT PRIMARY KEY AUTO_INCREMENT,
    warehouse_ID INT NOT NULL,
    product_ID INT NOT NULL,
    quantity INT NOT NULL CHECK (quantity>=0),
    note VARCHAR(100) ,
    FOREIGN KEY(warehouse_ID) REFERENCES warehouse(warehouse_ID)

    ON UPDATE CASCADE
    ON DELETE CASCADE,
    FOREIGN KEY(product_ID) REFERENCES products(product_ID)

    ON UPDATE CASCADE
    ON DELETE CASCADE
);
```

```
CREATE TABLE suppliers(
    supplier_ID INT PRIMARY KEY AUTO_INCREMENT,
    name VARCHAR(100) NOT NULL,
    address VARCHAR(255) NOT NULL,
    email VARCHAR(255) NOT NULL UNIQUE,
    contact VARCHAR(15) NOT NULL
);
```

```
CREATE TABLE purchase_orders(
    purchase_order_ID INT PRIMARY KEY AUTO_INCREMENT,
    quantity INT NOT NULL CHECK (quantity >= 0 ),
```

```

    date DATE NOT NULL,
    supplier_ID INT,
    warehouse_ID INT,

    payment_method_ID INT,

    status VARCHAR(20) DEFAULT 'pending',
    FOREIGN KEY(supplier_ID) REFERENCES suppliers(supplier_ID)
    ON DELETE CASCADE
    ON UPDATE CASCADE,
    FOREIGN KEY(warehouse_ID) REFERENCES warehouse(warehouse_ID)
    ON DELETE CASCADE
    ON UPDATE CASCADE,

    FOREIGN KEY(payment_method_ID) REFERENCES lookup(lookup_ID)
    ON DELETE CASCADE
    ON UPDATE CASCADE

);

CREATE TABLE purchase_order_details(
    podetail_ID INT PRIMARY KEY AUTO_INCREMENT,
    purchase_order_ID INT NOT NULL,
    product_ID INT ,
    Quantity INT NOT NULL CHECK (Quantity>=0),
    FOREIGN KEY(purchase_order_ID) REFERENCES purchase_orders(purchase_order_ID)
    ON UPDATE CASCADE
    ON DELETE CASCADE,
    FOREIGN KEY (product_id) REFERENCES products(product_id)
    ON UPDATE CASCADE
    ON DELETE SET NULL

);

CREATE TABLE sale_orders(
    sale_order_ID INT PRIMARY KEY AUTO_INCREMENT,
    quantity INT NOT NULL CHECK (quantity >= 0 ),
    date DATE NOT NULL,
    payment_method_ID INT,
    customer_ID INT,

    status VARCHAR(20) DEFAULT 'pending',
    FOREIGN KEY(payment_method_ID) REFERENCES lookup(lookup_ID)
    ON DELETE CASCADE
    ON UPDATE CASCADE,
    FOREIGN KEY(customer_ID) REFERENCES customers(customer_ID)
    ON DELETE CASCADE
    ON UPDATE CASCADE

);

CREATE TABLE sale_order_details(
    sodetail_ID INT PRIMARY KEY AUTO_INCREMENT,
    sale_order_ID INT NOT NULL,
    product_ID INT ,
    Quantity INT NOT NULL CHECK (Quantity>=0),
    FOREIGN KEY(sale_order_ID) REFERENCES sale_orders(sale_order_ID)

```

```
    ON UPDATE CASCADE
    ON DELETE CASCADE,
    FOREIGN KEY (product_ID) REFERENCES products(product_ID)
    ON UPDATE CASCADE
    ON DELETE SET NULL
);

CREATE TABLE supply(
    supply_ID INT PRIMARY KEY AUTO_INCREMENT,
    supplier_ID INT,
    warehouse_ID INT,
    FOREIGN KEY(supplier_ID) REFERENCES suppliers(supplier_ID)
    ON DELETE CASCADE
    ON UPDATE CASCADE,
    FOREIGN KEY(warehouse_ID) REFERENCES warehouse(warehouse_ID)
    ON DELETE CASCADE
    ON UPDATE CASCADE
);
```