

# Data Definition Language (DDL)

## 1/CREATE TABLE:

### ✓ **TABLE Product**

- *Column level: when creating the table:*

```
CREATE TABLE Product (Product_id VARCHAR2(20) PRIMARY KEY,  
Product_Name VARCHAR2(20) NOT NULL,  
Price NUMBER check (Price>0)) ;
```

- *Table level: (The ALTER TABLE statement is also used to add various constraints on an existing table):*

```
ALTER TABLE Product  
ADD PRIMARY KEY(Product_id) ;  
  
ALTER TABLE Product  
MODIFY Product Name VARCHAR2(20) NOT NULL ;  
  
ALTER TABLE Product  
MODIFY Price NUMBER POSITIVE VALUE ;
```

### ✓ **TABLE Customer:**

- *Column level: when creating the table:*

```
CREATE TABLE Customer (Customer_id VARCHAR2(20) PRIMARY KEY,  
Customer_Name VARCHAR2(20) NOT NULL,  
Customer_Tel NUMBER)
```

- *Table level:*

```
ALTER TABLE Customer  
ADD PRIMARY KEY(Customer_id) ;
```

ALTER TABLE Customer

MODIFY Customer\_Name VARCHAR2(20) NOT NULL ;

### ✓ **TABLE Orders:**

- *Column level: when creating the table:*

CREATE TABLE Orders (Customer\_id VARCHAR2(20) CONSTRAINT fk\_Customers FOREIGN KEY  
(Customer\_id) REFERENCES Customer(Customer\_id),

Product\_id VARCHAR2(20) CONSTRAINT fk\_Product FOREIGN KEY (Product\_id) REFERENCES Product  
(Product\_id),

Quantity NUMBER,

Total\_amount NUMBER,

Constraint composed pk\_Order primary key(Customer\_id,Product\_id)) ;

- *Table level:*

ALTER TABLE Orders

ADD FOREIGN KEY(Customer\_id) REFERENCES Customer(Customer\_id) ;

ALTER TABLE Orders

ADD FOREIGN KEY(Product\_id) REFERENCES Customer(Product\_id) ;

## **2/ Add Column:**

ALTER TABLE Product ADD Category VARCHAR2(20) ;

ALTER TABLE Orders ADD OrderDate DATE default SYSDATE;