CREATE TABLE items (

orderID NUMBER(4),

itemNumber NUMBER(4),

productId NUMBER(4),

quantity NUMBER(5),

PRIMARY KEY (orderID, itemNumber));

1 2

1 3

**What is a foreign key with Cascade DELETE in Oracle?**

A foreign key with cascade delete means that if a record in the parent table is deleted, then the corresponding records in the child table will automatically be deleted. This is called a cascade delete in Oracle.

A foreign key with a cascade delete can be defined in either a CREATE TABLE statement or an ALTER TABLE statement.

CREATE TABLE supplier

( supplier\_id number(10) not null,

supplier\_name varchar2(50) not null,

contact\_name varchar2(50),

CONSTRAINT supplier\_pk PRIMARY KEY (supplier\_id)

);

CREATE TABLE products

( product\_id number(10) not null,

supplier\_id number(10) not null,

CONSTRAINT fk\_supplier

FOREIGN KEY (supplier\_id)

REFERENCES supplier(supplier\_id)  
 ON DELETE CASCADE );

We could also create a foreign key (with a cascade delete) with more than one field as in the example below:

CREATE TABLE supplier

( supplier\_id numeric(10) not null,

supplier\_name varchar2(50) not null,

contact\_name varchar2(50),

CONSTRAINT supplier\_pk PRIMARY KEY (supplier\_id, supplier\_name)

);

CREATE TABLE products

( product\_id numeric(10) not null,

supplier\_id numeric(10) not null,

supplier\_name varchar2(50) not null,

CONSTRAINT fk\_supplier\_comp

FOREIGN KEY (supplier\_id, supplier\_name)

REFERENCES supplier(supplier\_id, supplier\_name)

ON DELETE CASCADE

);

## What is a foreign key with "Set NULL on Delete" in Oracle?

A foreign key with "set null on delete" means that if a record in the parent table is deleted, then the corresponding records in the child table will have the foreign key fields set to null. The records in the child table will **not** be deleted.

CREATE TABLE supplier

( supplier\_id numeric(10) not null,

supplier\_name varchar2(50) not null,

contact\_name varchar2(50),

CONSTRAINT supplier\_pk PRIMARY KEY (supplier\_id)

);

CREATE TABLE products

( product\_id numeric(10) not null,

supplier\_id numeric(10),

CONSTRAINT fk\_supplier

FOREIGN KEY (supplier\_id)

REFERENCES supplier(supplier\_id)

ON DELETE SET NULL

);