– shows you how to define foreign key constraints when creating a new table or add foreign key constraints for existing tables.

PostgreSQL Foreign Key

```sql
CREATE TABLE so_headers (
 id SERIAL PRIMARY KEY,
 customer_id INTEGER,
 ship_to VARCHAR (255)
);
```

```sql
CREATE TABLE so_items (
  item_id INTEGER NOT NULL,
  so_id INTEGER,
  product_id INTEGER,
  qty INTEGER,
  net_price NUMBER,
  PRIMARY KEY (item_id,so_id)
);
```

First way to define a foreign key constraint is to use the table constraint as

```sql
CREATE TABLE so_items (
  item_id INTEGER NOT NULL,
  so_id INTEGER REFERENCES so_headers(id),
  product_id INTEGER,
  qty INTEGER,
  net_price numeric,
  PRIMARY KEY (item_id,so_id)
);
```

Second way to define a foreign key constraint is to use the table constraint as follows:

```sql
CREATE TABLE so_items (
 item_id INTEGER NOT NULL,
 so_id INTEGER,
 product_id INTEGER,
 qty INTEGER,
 net_price NUMERIC,
 PRIMARY KEY (item_id, so_id),
 FOREIGN KEY (so_id) REFERENCES so_headers (id)
);
```