```
create table customer
        (customer_id                int,
         first_name                 varchar(20) not null,
         last_name                  varchar(20) not null,
         customer_phone_number      char(10),
         customer_email             varchar(50),
         payment_total              numeric(9,2) check (payment_total >=0),
         paid_total                 numeric(9,2) check (paid_total >=0),
         balance                    numeric(9,2) check (balance >=0),
         da_line_one                varchar(100) not null,
         da_line_two                varchar(100),
         da_city                    varchar(50) not null,
         da_state                   varchar(25) not null,
         da_zipcode                 char(5) not null,
         primary key(customer_id));

create table credit_card
        (card_number        char(16),
         card_owner_name    varchar(40),
         card_expire_date   char(4),
         card_cvv           char(3),
         cba_line_one       varchar(100),
         cba_line_two       varchar(100),
         cba_state          varchar(25),
         cba_zipcode        char(5),
         primary key (card_number));

create table orders
        (order_id                   int,
         customer_id                int,
         payment_card_number        char(16),
         ordering_total             numeric(9,2) check (ordering_total >=0),
         status                     varchar(8) check (status in ((‘issued’, ‘send’, ‘received’)
         primary key (order_id),
         foreign key (customer_id) references customer,
         foreign key (payment_card_number) references credit_card (card_number));

create table paidwith
        (order_id           int,
        card_number         char(16),
        primary key (order_id, card_number),
        foreign key (order_id) references orders,
        foreign key (card_number) references credit_card);
```

```
create table staff
        (staff_id               int,
         first_name             varchar(20) not null,
         last_name              varchar(20) not null,
         a_line_one             varchar(100),
         a_line_two             varchar(100),
         a_city                 varchar(50),
         a_state                varchar(25),
         a_zipcode              char(5),
         staff_phone_number     char(10),
         staff_email            varchar(50) not null,
         salary                 int not null,
         job_title              varchar(20) not null,
         primary key (staff_id));

create table product
        (product_id             int,
         product_name           varchar(30) not null,
         category               varchar(30) not null,
         size                   numeric(12,5) not null,
         primary key (product_id));

create table label
        (product_id                     int,
         category                       varchar(30) not null,
         additional_information         varchar(150) not null,
         primary key (product_id));

create table warehouse
        (warehouse_id                   int,
         warehouse_name                 varchar(20),
         a_line_one                     varchar(100),
         a_line_two                     varchar(100),
         a_city                         varchar(50),
         a_state                        varchar(25),
         a_zipcode                      char(5),
         capacity                       numeric(12,5) check (capacity >=0),
         capacity_used                  numeric(12,5) check (capacity_used >=0) default 0,
         capacity_remained              numeric(12,5) check (capacity_remained >=0),
         primary key (warehouse_id));

create table product_price
        (product_id             int,
         delivery_state         varchar(25),
         unit_price             numeric(9,2),
         primary key (product_id, delivery_state),
         foreign key (product_id) references product);
```

```
create table supplier
        (supplier_id            int,
         name                   varchar(20) not null,
         supplier_email         varchar(50),
         supplier_number        char(10),
         a_line_one             varchar(100),
         a_line_two             varchar(100),
         a_city                 varchar(50),
         a_state                varchar(25),
         a_zipcode              char(5),
         primary key (supplier_id));

create table order_item
        (order_id               int,
         product_id             int,
         quantity               int check (quantity  >0),
         unit_price             numeric(9,2),
         subtotal               numeric(9,2),
         primary key (order_id, product_id),
        foreign key (order_id) references orders,
        foreign key (product_id) references product);

create table order_item_warehouse_id
        ( order_id              int,
         product_id             int,
         warehouse_id           int,
         primary key (order_id, product_id, warehouse_id),
         foreign key (order_id) references orders,
         foreign key (product_id) references product,
         foreign key (warehouse_id) references warehouse);

create table supplier_item
        (supplier_id            int,
         product_id             int,
         supplier_price         numeric(9,2),
         primary key (product_id),
         foreign key (supplier_id) references supplier,
         foreign key (product_id) references product);

create table owns
        (customer_id            int,
         card_number            char(16),
         foreign key (customer_id) references customer,
         foreign key (card_number) references credit_card);
```

```
create table pricing
        (staff_id               int,
        product_id              int,
        delivery_state          varchar(25),
        new_price               numeric(9,2) check (new_price  >0),
        primary key(product_id, delivery_state),
        foreign key (staff_id) references staff,
        foreign key (product_id, delivery_state) references product_price);

create table stock
        (product_id             int,
         warehouse_id           int,
         item_quantity          int check (item_quantity  >= 0),
         size_total             numeric(12,5),
         primary key (product_id, warehouse_id),
        foreign key (product_id) references product,
        foreign key (warehouse_id) references warehouse);

create table add_stock
        (staff_id               int,
        product_id              int,
        warehouse_id            int,
        add_quantity            int check (add_quantity  >0),
        add_size                numeric(12,5),
        primary key (product_id, warehouse_id),
        foreign key (staff_id) references staff,
        foreign key (product_id, warehouse_id) references stock);

create table request
        (staff_id               int,
         supplier_id            int,
         details                varchar(100),
         primary key (staff_id, supplier_id, details),
         foreign key (staff_id) references staff,
         foreign key (supplier_id) references supplier);


create table ordering
        (customer_id            int,
         order_id               int,
         staff_id               int,
         primary key (customer_id, order_id, staff_id),
         foreign key (customer_id) references customer,
         foreign key (order_id) references orders,
         foreign key (staff_id) references staff);
```

```
create table availability
        (product_id             int,
        warehouse_id            int,
        item_quantity           int check (item_quantity  >=0),
        primary key(product_id, warehouse_id, item_quantity)
        foreign key (product_id) references product,
        foreign key (warehouse_id) references warehouse);

create table includes
        (order_id               int,
        product_id              int,
        quantity                int check (quantity>0),
        primary key (order_id, product_id),
        foreign key (order_id) references orders,
        foreign key (product_id) references product);


create table supplies
        (supplier_id            int,
         product_id             int,
         supplier_price         numeric(9,2),
         primary key(supplier_id, product_id, supplier_price),
         foreign key (supplier_id) references supplier,
         foreign key (product_id) references product);


create table stores
        (product_id             int,
        warehouse_id            int,
        size_total              numeric(12,5),
        primary key (product_id, warehouse_id),
        foreign key (product_id) references product,
        foreign key (warehouse_id) references warehouse);
```