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

create table credit_card
        (card_number            char(16) not null,
         card_owner_name        varchar(40),
         card_expire_date       char(5),
         card_cvv               char(3),
         cba_line_one           varchar(100),
         cba_line_two           varchar(100),
         cba_state              varchar(25),
         cba_zipcode            varchar(10),
         primary key (card_number));

create table orders
        (order_id                       char(20) not null,
         customer_id                    char(20),
         payment_card_number            varchar(16),
         ordering_total                 smallint 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               char(20),
        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               char(20) not null,
         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),
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        staff_phone_number  char(10),
        staff_email         varchar(50),
        salary              int,
        job_title           varchar(20)
        primary key (staff_id));

create table product
        (product_id         char(20) not null,
        product_name varchar(30),
        category            varchar(30),
        size                numeric(9,2),
        primary key (product_id));

create table label
        (product_id                 char(20),
        category                    varchar(30),
        additional_information      varchar(150),
        primary key (product_id));

create table warehouse
        (warehouse_id               char(20),
        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(9,2) check (capacity >=0),
        capacity_used               numeric(9,2) check (capacity_used >=0),
        capacity_remained           numeric(9,2) check (capacity_remained >=0),
        primary key (warehouse_id));

create table product_price
        (product_id         char(20),
        delivery_state      varchar(25),
        unit_price          smallint,
        primary key (product_id, delivery_state),
        foreign key (product_id) references product   );

create table supplier
        (supplier_id        char(20),
        name                varchar(20),
        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           char(20),
        product_id          char(20),
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        quantity            int check (quantity  >0),
        unit_price          smallint,
        subtotal            int,
        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          char(20),
        product_id          char(20),
        warehouse_id        char(20),
        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        char(20),
        product_id          char(20),
        supplier_price      smallint,
        primary key (product_id),
        foreign key (supplier_id) references supplier,
        foreign key (product_id) references product);

create table owns
        (customer_id        char(20),
        card_number         char(16),
        foreign key (customer_id) references customer,
        foreign key (card_number) references credit_card);


create table pricing
        (staff_id           char(20),
        product_id          char(20),
        delivery_state      varchar(25),
        new_price           smallint 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         char(20),
        warehouse_id        char(20),
        item_quantity       int check (item_quantity  >= 0),
        size_total          numeric(9,2),
        primary key (product_id, warehouse_id),
        foreign key (product_id) references product,
        foreign key (warehouse_id) references warehouse);

create table add_stock
        (staff_id           char(20),
        product_id          char(20),
        warehouse_id        char(20),
        add_quantity        int check (add_quantity  >0),
```

```
        add_size                numeric(9,2),
        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               char(20),
         supplier_id            char(20),
         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            char(20),
         order_id               char(20),
         staff_id               char(20),
        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             char(20),
        warehouse_id            char(20),
        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               char(20),
        product_id              char(20),
        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            char(20),
         product_id             char(20),
        supplier_price          smallint,
         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             char(20),
        warehouse_id            char(20),
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```
size_total                  numeric(9,2),
primary key (product_id, warehouse_id),
foreign key (product_id) references product,
foreign key (warehouse_id) references warehouse);
```