```sql
create table users (
users_id serial primary key,
login varchar,
password varchar
);

CREATE TABLE material_types (
    type_id SERIAL PRIMARY KEY,
    material_type VARCHAR(255) NOT NULL,
    defect_percentage NUMERIC(5,4) NOT NULL
);

CREATE TABLE product_types (
    type_id SERIAL PRIMARY KEY,
    product_type VARCHAR(255) NOT NULL,
    coefficient NUMERIC(4,2) NOT NULL
);

CREATE TABLE partners (
    partner_id SERIAL PRIMARY KEY,
    partner_type VARCHAR(50) NOT NULL,
    partner_name VARCHAR(255) NOT NULL,
    director VARCHAR(255) NOT NULL,
    email VARCHAR(255) NOT NULL,
    phone VARCHAR(50) NOT NULL,
    legal_address TEXT NOT NULL,
    inn VARCHAR(12) NOT NULL UNIQUE,
```

```sql
    rating INTEGER CHECK (rating BETWEEN 1 AND 10)
);

CREATE TABLE products (
    product_id SERIAL PRIMARY KEY,
    product_type_id INTEGER REFERENCES product_types(type_id) NOT
NULL,
    product_name VARCHAR(255) NOT NULL,
    article VARCHAR(50) NOT NULL,
    min_partner_price NUMERIC(10,2) NOT NULL
);

CREATE TABLE partner_products (
    sale_id SERIAL PRIMARY KEY,
    product_id INTEGER REFERENCES products(product_id) NOT NULL,
    partner_id INTEGER REFERENCES partners(partner_id) NOT NULL,
    quantity INTEGER NOT NULL CHECK (quantity > 0),
    sale_date TIMESTAMP NOT NULL
);

CREATE INDEX idx_partner_products_date ON partner_products(sale_date);
CREATE INDEX idx_partners_name ON partners(partner_name);
CREATE INDEX idx_products_name ON products(product_name);

CREATE TABLE materials (
    material_id SERIAL PRIMARY KEY,
    material_type_id INTEGER REFERENCES material_types(type_id),
    material_name VARCHAR(255) NOT NULL,
```

supplier VARCHAR(255),

    purchase_price NUMERIC(10,2),

    stock_quantity INTEGER

);