In a system that has three main models; Product, Ingredient, and Order.

A Burger (Product) may have several ingredients:

- 150g Beef
- 30g Cheese
- 20g Onion

The system keeps the stock of each of these ingredients stored in the database. You can use the following levels for seeding the database:

- 20kg Beef
- 5kg Cheese
- 1kg Onion

When a customer makes an order that includes a Burger. The system needs to update the stock of each of the ingredients so it reflects the amounts consumed.

Also when any of the ingredients stock level reaches 50%, the system should send an email message to alert the merchant they need to buy more of this ingredient.

Requirements:

First, Write a controller action that:

1. Accepts the order details from the request payload.
2. Persists the Order in the database.
3. Updates the stock of the ingredients.

Second, ensure that en email is sent once the level of any of the ingredients reach below 50%. Only a single email should be sent, further consumption of the same ingredient below 50% shouldn't trigger an email.

Finally, write several test cases that assert the order was correctly stored and the stock was correctly updated.

The incoming payload may look like this:

```
{
    "products": [
        {
            "product_id": 1,
            "quantity": 2,
        }
    ]
}
```