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## Grocery Inventory Simulation

```
#include <iostream>
```

```
#include <vector>
```

```
#include <algorithm>
```

```
void printInventory(const std::vector<std::string>& inventory) {
```

```
    std::cout << "[";
```

```
    for (size_t i = 0; i < inventory.size(); ++i) {
```

```
        std::cout << "\"" << inventory[i] << "\"";
```

```
        if (i < inventory.size() - 1) {
```

```
            std::cout << ", ";
```

```
        }
```

```
    }
```

```
    std::cout << "]" << std::endl;
```

```
}
```

```
std::vector<std::string> updateInventory(const std::vector<std::string>& currentInventory,
```

```
    const std::vector<std::string>& newShipment,
```

```
    const std::vector<std::string>& soldOutItems) {
```

```

    std::vector<std::string> updatedInventory = currentInventory;

    updatedInventory.insert(updatedInventory.end(), newShipment.begin(),
newShipment.end());

    std::sort(updatedInventory.begin(), updatedInventory.end());

updatedInventory.erase(std::unique(updatedInventory.begin(),updatedInventory.end()),upd
atedInventory.end());

    for (const auto& item : soldOutItems) {

        updatedInventory.erase(std::remove(updatedInventory.begin(),
updatedInventory.end(), item), updatedInventory.end());

    }

    return updatedInventory;
}

```

```

int main() {

    std::vector<std::string> currentInventory = {"apples", "bananas", "pears"};

    std::vector<std::string> newShipment = {"kiwis", "bananas", "grapes"};

    std::vector<std::string> soldOutItems = {"apples", "oranges"};

    std::cout << "Current Inventory: ";

    printInventory(currentInventory);

    std::cout << "Shipment: ";

    printInventory(newShipment);

    std::cout << "Soul-out items: ";

    printInventory(soldOutItems);

    std::vector<std::string> updatedInventory = updateInventory(currentInventory,
newShipment, soldOutItems);
}

```

```
std::cout << "Updated Inventory: ";  
printInventory(updatedInventory);
```

```
return 0;
```

```
}
```