```
package com.example.demo.Service;
import com.example.demo.Modele.Product;
import com.example.demo.Modele.User;
import lombok.RequiredArgsConstructor;
import org.springframework.stereotype.Service;
import java.util.ArrayList;
@Service
@RequiredArgsConstructor
public class ProductService {
  private final ArrayList<Product> product = new ArrayList<>();
  private final MerchantStockService merchantStockService;
  private final UserService userService;
  private Product[] products;
  public ArrayList<Product> getProduct() {
    return this.product;
  }
  public Boolean updateProduct(Product product) {
    return true;
  }
  public Object addProduct(Product product, boolean MerchantService) {
    boolean MerchantStockService = merchantStockService.addMerchantStock();
    if (MerchantService == null) {
      return " This Is Valid a Bad Request";
      return product.add(product);
```

```
}
}
public Integer buyProduct(String productID,String userID) {
  Product currentProduct = findproductByIdById(productID);
  User currentUser = userService.getUser(userID);
  if (currentProduct == null) {
    return -1;
  }
  if (currentUser == null) {
    return 0;
  }
  if (currentProduct.getId() => currentUser.getBalance()){
    return 1;
  }
}
public Product findproductByIdById(String productID){
  for (Product product:products) {
    if(product.getId().equals(productID)){
      return product;
    }
  }
  return null;
}
```

```
public boolean deletProduct (String id){
    Product product = getProduct(id);
    if (product == null) {
      return false;
    }
    product.remove(product);
    return true;
  }
  public Product getProduct (String productId){
    for (Product product : products) {
      if (product.getId().equals(productId)) {
        return product;
      }
    }
    return null;
  }
}
```