5 extra endpoints

1-getBuyProduct

2-getRangPriceCategory

3-ReturnProduct

4-Favorites

5-generateRating

1-getBuyProduct

```
///////1
    public ArrayList<Product> getBuyProduct(String userId,String productName ) {   2 usages
        ArrayList<Product> products = new ArrayList<>();
        for (Product p : product.products) {
            if (!p.getProductName().equals(productName)) {
                for (User u : users) {
                    if (!u.getUserID().equals(userId)) {
                        return null;
                    }
                }
            }
        }
        for(User u : users) {
            if (u.getUserID().equals(userId)) {
                for ( Product p: getBuy) {
                    if(p.getProductName().equals(productName)){
                        products.add(p);
                    }
                }
            }
        }
        return products;
    }
```

2-getRangPriceCategory

```java
/////////2
    public ArrayList<Product> getRangPriceCategory(String categoryId,int p1 , int p2 ) {  2 usages

    ArrayList<Product> products = new ArrayList<>();
    for(Product p : product.products ) {
        if(!p.getCategoryId().equals(categoryId)) {
            return null;
        }
      }
    if (p1 < 0 && p2 <0 && p1<p2){
        return null;
    }


    for (Product p : product.products) {
        if(p1>=p.getProductPrice() || p2<=p.getProductPrice()){
            products.add(p);
        }
    }
    return products;

    }
```

3-ReturnProduct

```
/////////3
    public String ReturnProduct(String userAdmin ,String userCustomer,   String productId , String merchantId){  1 usage
        int stock = 0 ;
        double price = 0;
        for(User u : users) {
        if (u.getUserID().equals(userAdmin)) {
            if(!userAdmin.equals("Admin")) {
                return "You do not have permission to edit.";
            }
        }else
            return "id admin isn't found";
    }
    for(User u : users) {
        if (u.getUserID().equals(userCustomer)) {
            if(!userCustomer.equals("Customer")) {
                return "Log in with your user account ";
            }
        }else
            return "id customer isn't found";
    }
    for(Product p : product.products) {
        if(!p.getProductId().equals(productId)) {
            return "Product id isn't found";
        }
        price = p.getProductPrice();
    }
    for(MerchantStock m : merchantStock.merchantStocks) {
        if(!m.getMerchantId().equals(merchantId)) {
            return "Merchant id isn't found";
        }
        stock = m.getStock();
    }
```

4-Favorites

```
////////4

public ArrayList<Product> Favorites(String userId , String productId ) {  2 usages
    ArrayList<Product> products = new ArrayList<>();
    for(User u : users) {
        if (!u.getUserID().equals(userId)) {
            for (Product p : product.products) {
                if(!p.getProductId().equals(productId)) {
                    return null;
                }
            }

        }
    }
    for(Product p : product.products) {
        if(p.getProductId().equals(productId)) {
            products.add(p);
        }
    }
    return products;
}
```

5-generateRating

```
/////////////5


public String generateRating(String userId, String productId) {  1 usage
Random random = new Random();

for(User u : users) {
    if (!u.getUserID().equals(userId)) {
        return "user id isn't found";
    }
}


for (Product p : product.products) {
    if (!p.getProductId().equals(productId)) {
        return "product id isn't found";
    }
}

    int rating = random.nextInt( bound: 5) + 1;
    String star = "*".repeat(rating);
    return star;
}
```