

```
import java.util.Date;

public class Bread extends Product{
    private Size size;
    private Date expDate;
    static public int amountBread;

    Bread(){
        super();
        amountBread++;
    }
    Bread(String productCode , double price , Date expDate ,Size size){
        super(productCode , price);
        this.size = size;
        this.expDate = expDate;
        amountBread++;
    }

    public Size getSize() {
        return size;
    }
    public Date getExpDate() {
        return expDate;
    }

    public int getAmountBread() {
        return amountBread;
    }
    @Override
    public String toString() {
        return super.toString() + "Bread [size=" + size + "]";
    }
}

enum Size{
    S,M,L
}
```

```
public class Calculator extends Product{
    private double warrantyYear;
    static public int amountCal;
    Calculator(){
        super();
        Calculator.amountCal++;
    }
    Calculator(String productCode , double price,double warrantyYear){
        super(productCode , price);
        this.warrantyYear = warrantyYear;
        Calculator.amountCal++;
    }

    public double getWarrantyYear() {
        return warrantyYear;
    }
    @Override
    public String toString() {
        return super.toString() + "Calculator [warrantyYear=" + warrantyYear +
    "];
    }
}
```

```
import java.util.Date;

public class Main {
    public static void main(String[] args) {
        try{
            Bread bread1 = new Bread("BRE1", 20, new Date(2022,05,20),
Size.S);
            Calculator cal1 = new Calculator("CAL1", 100, 1);
            System.out.println("Bread amount: " + Bread.amountBread);
            System.out.println("Calculator amount: " + Calculator.amountCal);
            System.out.println("Total income: " + Product.totalIncome);
            Product.sale(bread1);
            System.out.println("Bread amount: " + Bread.amountBread);
            System.out.println("Calculator amount: " + Calculator.amountCal);
            System.out.println("Total income: " + Product.totalIncome);
            Product.sale(cal1);
            System.out.println("Bread amount: " + Bread.amountBread);
            System.out.println("Calculator amount: " + Calculator.amountCal);
            System.out.println("Total income: " + Product.totalIncome);
        }
        catch(Exception ex){
            System.out.println(ex);
        }
    }
}
```

```

public class Product implements Comparable<Product>{
    private String productCode;
    private double price;
    static protected int amount;
    static protected double totalIncome;

    Product(){
        Product.amount++;
    }
    Product(String productCode , double price){
        this.price = price;
        this.productCode = productCode;
        Product.amount++;
    }
    public double getPrice() {
        return price;
    }
    public void setPrice(double price) {
        this.price = price;
    }
    public int getAmount() {
        return amount;
    }

    public String getProductCode() {
        return productCode;
    }
    static public void sale(Product product){
        if(product instanceof Bread){
            Bread bread = (Bread)product;
            switch(bread.getSize()){
                case S :
                    Product.amount--;
                    Bread.amountBread--;
                    Product.totalIncome += bread.getPrice();
                    System.out.println("sale the " + bread.toString());
                    break;
                case M :
                    Product.amount--;
                    Bread.amountBread--;
                    Product.totalIncome += bread.getPrice()+5;
                    System.out.println("sale the " + bread.toString());
                    break;
                case L :
                    Product.amount--;
                    Bread.amountBread--;
                    Product.totalIncome += bread.getPrice()+8;
                    System.out.println("sale the " + bread.toString());

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        break;
    }
}
else if(product instanceof Calculator){
    Calculator cal = (Calculator)product;
    Product.amount--;
    Calculator.amountCal--;
    Product.totalIncome += cal.getPrice();
    System.out.println("sale the" + cal.toString());
}
}

@Override
public int compareTo(Product o) {
    if(o.productCode == this.productCode){
        return 1;
    }
    else{
        return 0;
    }
}

@Override
public String toString() {
    return "Product [amount=" + amount + ", code=" + productCode + ",
price=" + price + "]\n";
}
}

```