SET 2

1. Design a class BankAccount with properties accountNumber and balance, and methods deposit() and withdraw(). Extend this class with subclasses SavingsAccount and CheckingAccount. Implement specific rules such as minimum balance requirements and interest calculation for savings accounts.

A.

```
class bankAccount
{int acno=1235665686;
    double balance=10000;

     void deposit(double n)
    {
        System.out.println("accountno:"+acno);
        System.out.println("deposit ammount:"+n);
        System.out.println("balance:"+(balance+n));
    }
 void withdraw(double m)
{
double total=balance-m;
System.out.println("remaining balance:"+total);
}}
class saving extends bankAccount
{
     void saving() {
    System.out.println("minimum balance should be greater than 1000$");}}
class checking extends bankAccount
{  void checking(){
    System.out.println("interst is based on withdraw ammount");}}
public class main{
    public static void main(String[] args)
    {
        bankAccount b=new bankAccount();
        saving s=new saving();
        checking c=new checking();
        b.deposit(12000);
        b.withdraw(2000);
        s.saving();
        c.checking();
    }
}
```

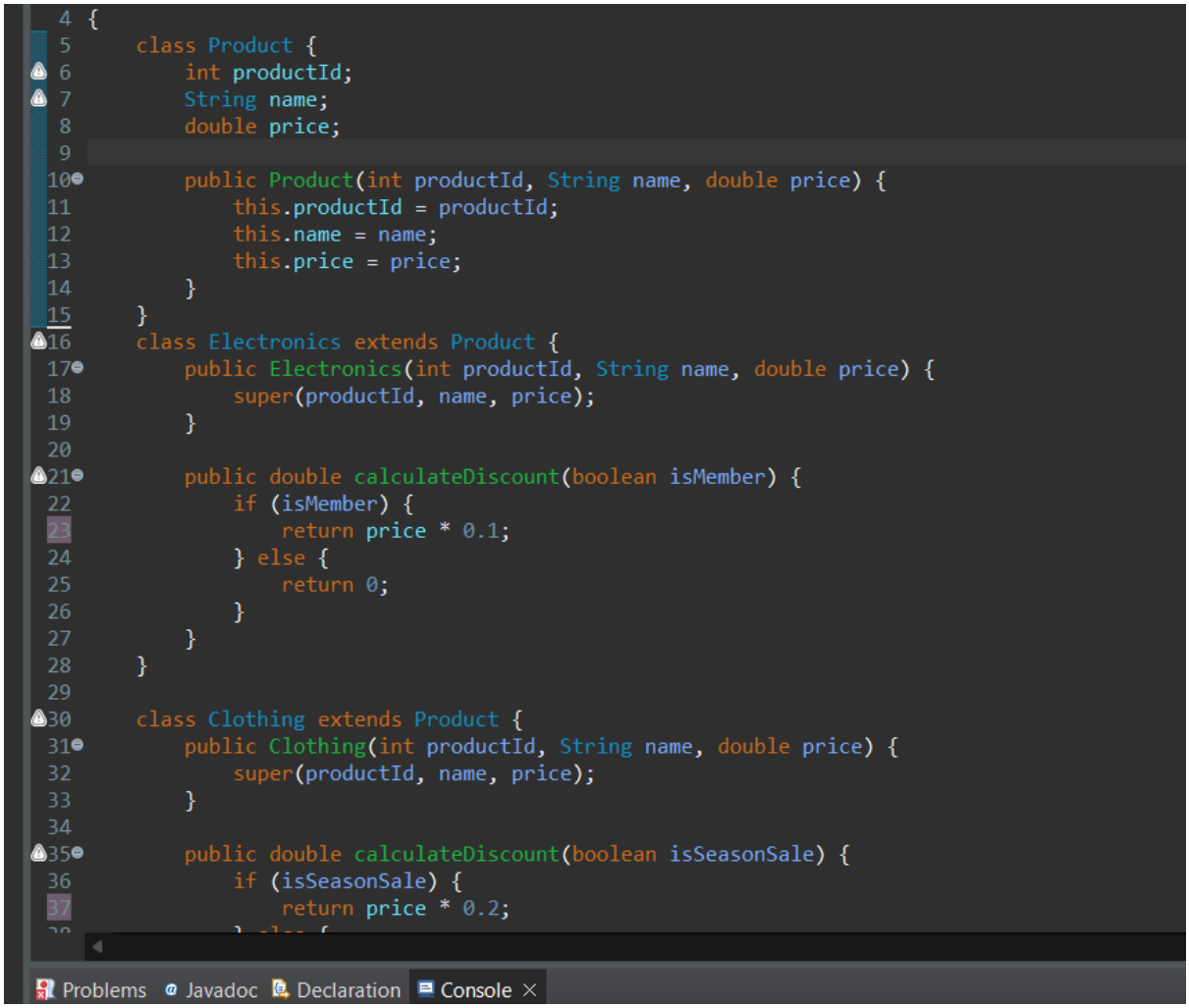
Problems Javadoc Declaration Console

<terminated> main [Java Application] C:\Program Files\Java\jdk-22\bin\javaw.exe (7 Aug 2024, 2:53:35 pm – 2:53:37

```
accountno:1235665686
deposit ammount:12000.0
balance:22000.0
remaining balance:8000.0
```

2. Create a base class GameCharacter with properties name, health, and level. Extend this class with subclasses Warrior, Mage, and Archer. Implement methods such as attack() and defend() differently for each subclass, showcasing polymorphism through inheritance.

A.



```
{
    class Product {
        int productId;
        String name;
        double price;

        public Product(int productId, String name, double price) {
            this.productId = productId;
            this.name = name;
            this.price = price;
        }
    }
    class Electronics extends Product {
        public Electronics(int productId, String name, double price) {
            super(productId, name, price);
        }

        public double calculateDiscount(boolean isMember) {
            if (isMember) {
                return price * 0.1;
            } else {
                return 0;
            }
        }
    }

    class Clothing extends Product {
        public Clothing(int productId, String name, double price) {
            super(productId, name, price);
        }

        public double calculateDiscount(boolean isSeasonSale) {
            if (isSeasonSale) {
                return price * 0.2;
```

Problems Javadoc Declaration Console