





```

public class prog {
    public static void main(String[] args) {
        aType at1 = new aType("Thinkpad Docking Station");

        nType nt1 = new nType("ThnikPad");
        nType nt2 = new nType("Apple MacBook");

        Ausstattung as1 = new Ausstattung("aus1", at1);

        Notebook nb1 = new Notebook("nb1" , nt1);
        Notebook nb2 = new Notebook("nb2", nt2);

        nt1.addAllowed(at1);

        System.out.println(nb1.addPart(as1));
        System.out.println(nb2.addPart(as1));
    }
}

public class Notebook {
    private ArrayList<Ausstattung> parts = null;
    private String name;
    private nType nType;

    public Notebook(String name, nr3.nType nType) {
        parts = new ArrayList<Ausstattung>();
        this.name = name;
        this.nType = nType;
    }

    public boolean addPart(Ausstattung part) {
        if (this.getnType().isAllowed(part.getaType())) {
            this.parts.add(part);
            return true;
        } else {
            return false;
        }
    }

    public ArrayList<Ausstattung> getParts() {
        return parts;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public nr3.nType getnType() {
        return nType;
    }

    public void setnType(nr3.nType nType) {
        this.nType = nType;
    }
}

```

```
public class nType {
    private String name;
    private ArrayList<aType> allowed = null;

    public nType(String name) {
        allowed = new ArrayList<aType>();
        this.name = name;
    }

    public boolean isAllowed(aType aType) {
        return this.allowed.contains(aType);
    }

    public void addAllowed(aType allowed) {
        this.allowed.add(allowed);
    }

    public ArrayList<aType> getAllowed() {
        return allowed;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }
}

public class Ausstattung {
    private String name;
    private aType aType;

    public Ausstattung(String name, nr3.aType aType) {
        this.name = name;
        this.aType = aType;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public nr3.aType getaType() {
        return aType;
    }

    public void setaType(nr3.aType aType) {
        this.aType = aType;
    }
}

public class aType {
    private String name;

    public aType(String name) {
        this.name = name;
    }
}
```