Pass-by-Value
Pass-by-Reference

openHPI-Java-Team

Hasso-Plattner-Institut

A.	B.	W.
#0		
#1		
#2		
#3		
#4		
#5		

```java
void doStuff() {
    int myVar= 5;
    addOne(myVar);
    System.out.println(myVar);
}
int addOne(int number) {
    return ++number;
}
```

Pass-by-Value

A.	B.	W.
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```

A.	B.	W.
#0		
#1	myVar	5
#2	myVar*	5
#3		
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A.	B.	W.
#0		
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#2	myVar*	6
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Ausgabe:
5

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Ausgabe:
6

A.	B.	W.
#0		
#1	ronja	
#2	ds	
#3		
#4		
#5		

Robot
batteryLoad: 5

```java
public class DockingStation {
    public void loadRobot(Robot robot) {
        robot.setLoad(robot.getLoad()++);
    }
}
```

```java
public class Story {
    public static void main(String[] args) {
        Robot ronja = new Robot(5);
        DockingStation ds =
                    new DockingStation();

        ronja.getLoad();
        ds.loadRobot(ronja);
        ronja.getLoad();
```
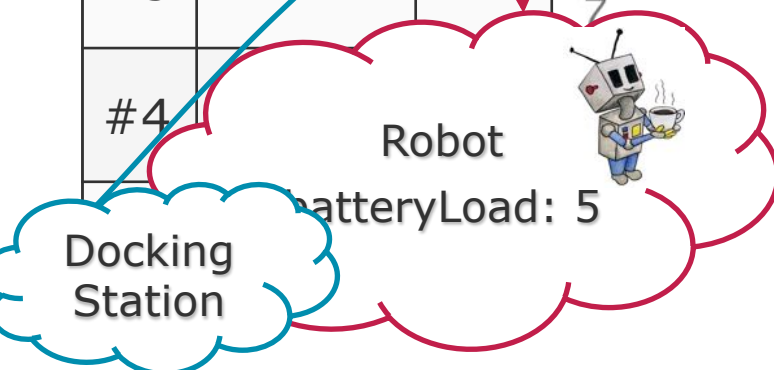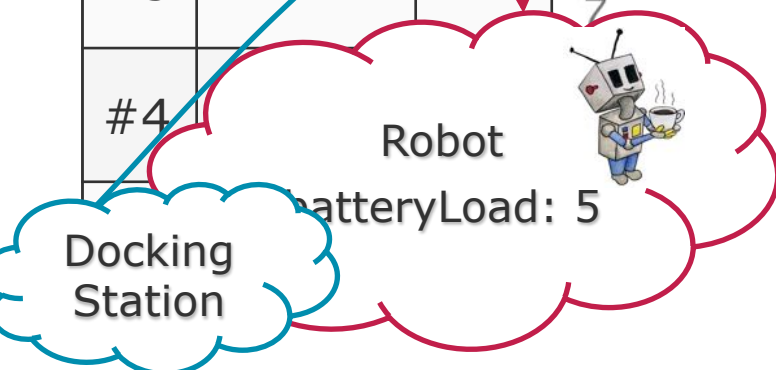
A.	B.	W.
#0		
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Robot
BatteryLoad: 5

Docking
Station

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A.	B.	W.
#0		
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Robot
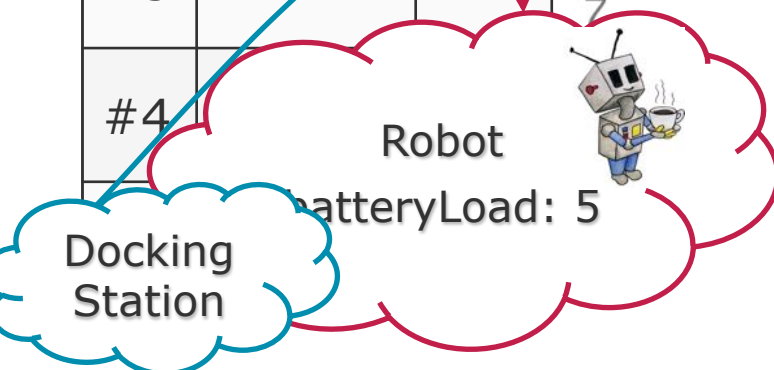BatteryLoad: 5

Docking
Station

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        DockingStation ds =
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        ronja.getLoad();  ➔ 5
        ds.loadRobot(ronja);
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```

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Robot
batteryLoad: 5

Docking
Station

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        DockingStation ds =
                        new DockingStation();

        ronja.getLoad(); ➔ 5
        ds.loadRobot(ronja);
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```

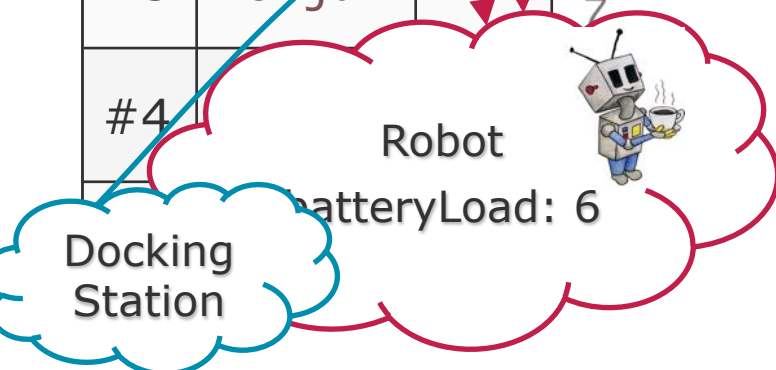| A.	B.	W.
#0		
#1	ronja	
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3          robot.setLoad(robot.getLoad()++);
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1  public class Story {
2      public static void main(String[] args) {
3          Robot ronja = new Robot(5);
4          DockingStation ds =
5                      new DockingStation();
6
7          ronja.getLoad(); ➜ 5
           ds.loadRobot(ronja);
           ronja.getLoad();
```

Robot
batteryLoad: 6

Docking
Station

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Robot
batteryLoad: 6

Docking
Station

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    public static void main(String[] args) {
        Robot ronja = new Robot(5);
        DockingStation ds =
                        new DockingStation();

        ronja.getLoad(); ➔ 5
        ds.loadRobot(ronja);
        ronja.getLoad(); ➔ 6
```