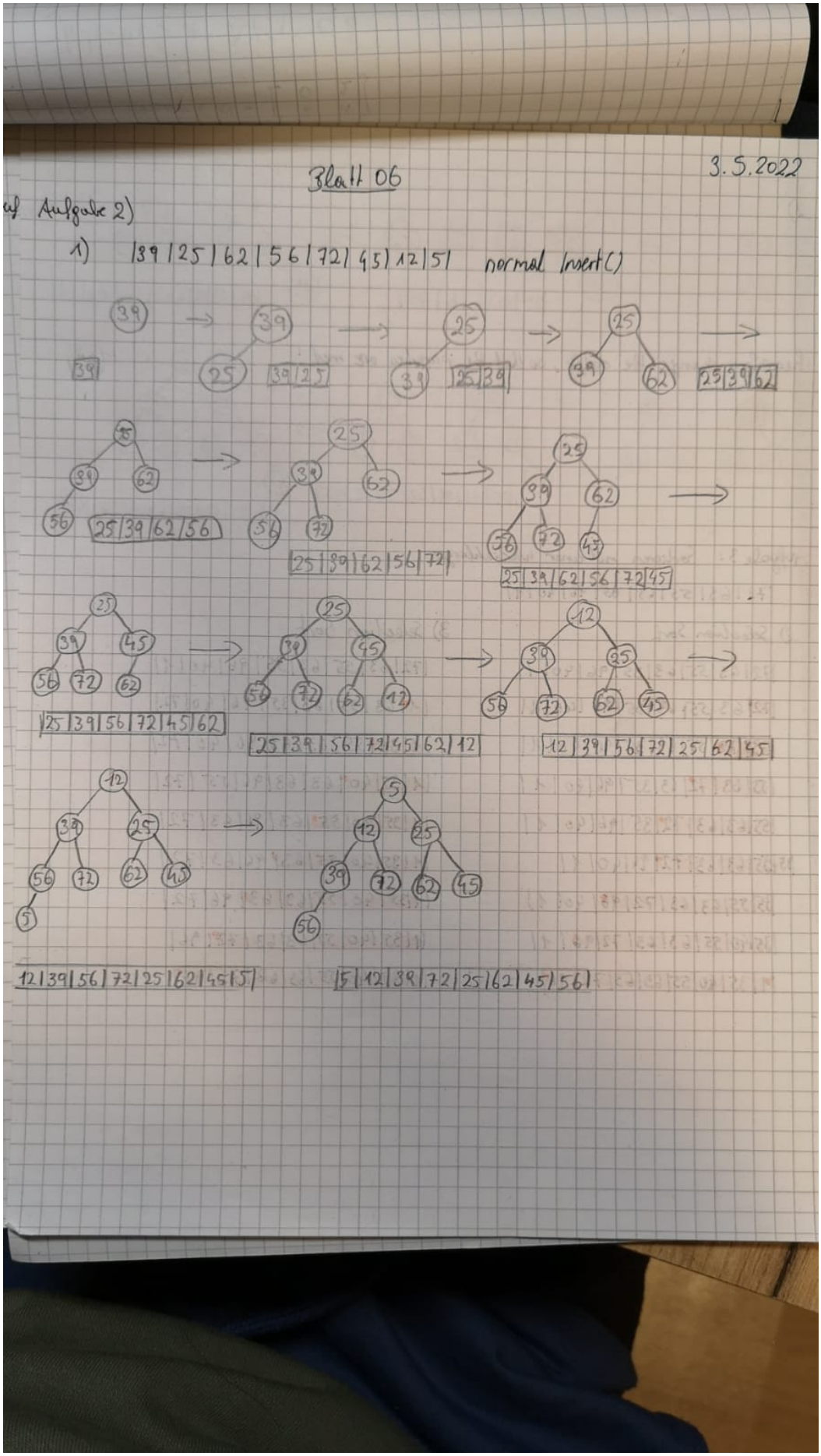
6️⃣

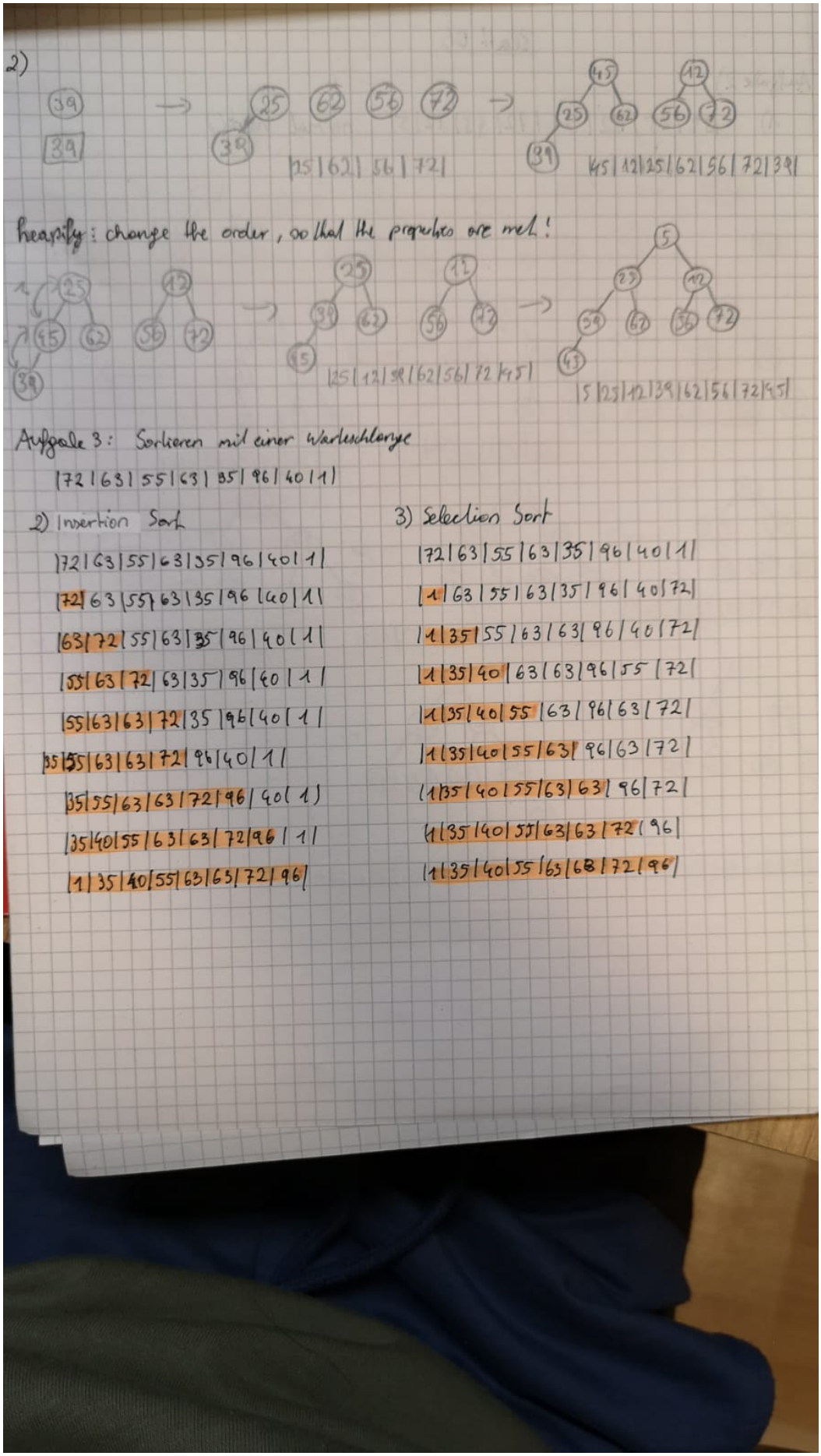
Blatt 6

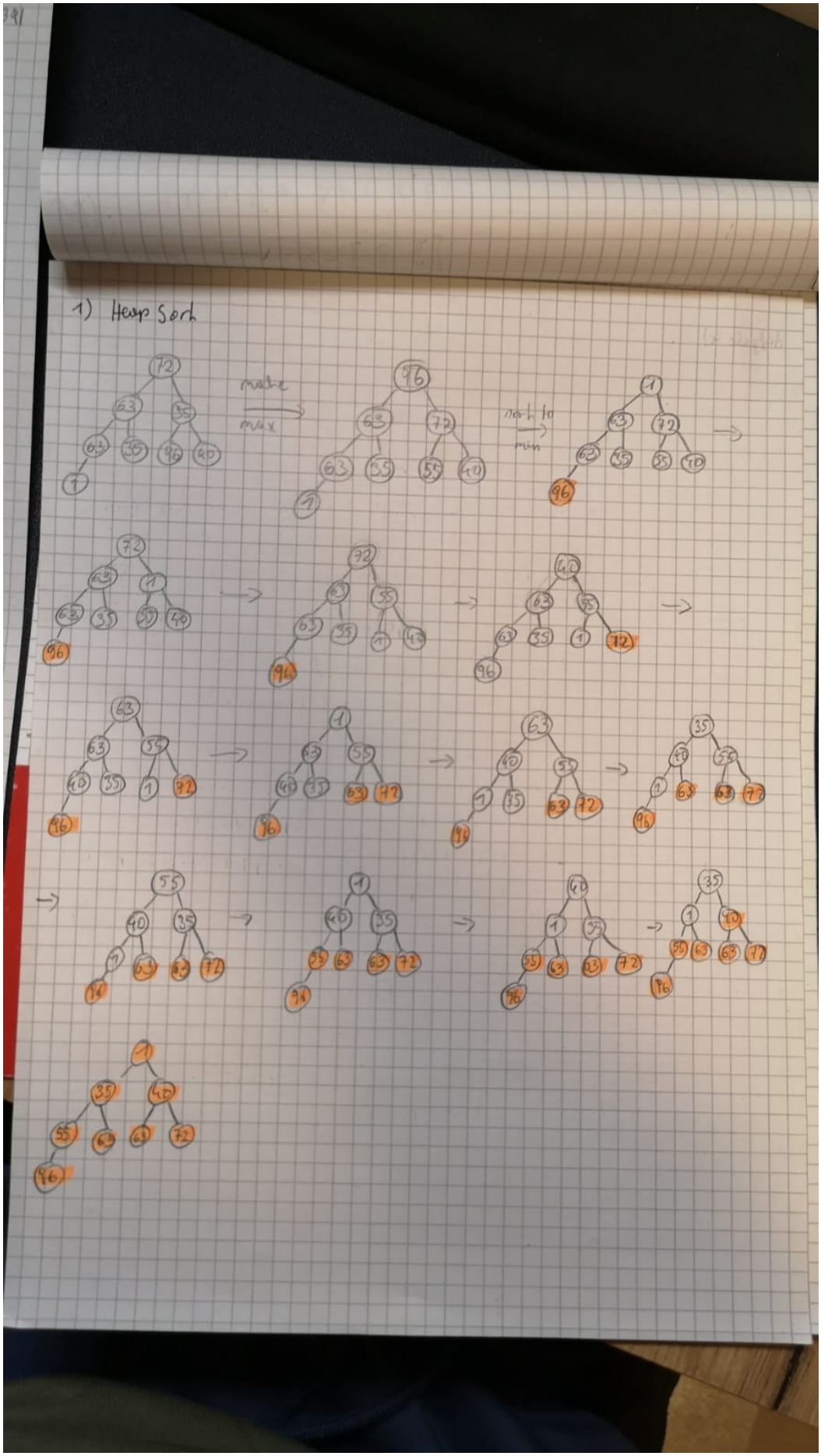
Aufgabe 1

```
@Override
    public int compare(IncomingPlane o1, IncomingPlane o2) {
        if (o1.getRemainingFuel() < 25 || o2.getRemainingFuel() < 25) {
            if (o1.getRemainingFuel() < o2.getRemainingFuel()) {
                return -1;
            } else if (o1.getRemainingFuel() > o2.getRemainingFuel()) {
                return 1;
            } else {
                return 0;
            }
        } else if (!(o1.getRemainingFuel() < 25 || o2.getRemainingFuel() < 25)){
            if (o1.getDelay() < 0 && o2.getDelay() < 0){
                if (o1.getRemainingFuel() < o2.getRemainingFuel()) {
                    return -1;
                } else if (o1.getRemainingFuel() > o2.getRemainingFuel()) {
                    return 1;
                } else {
                    return 0;
                }
            }
        } else {
            if (o1.getDelay() < o2.getDelay()) {
                return -1;
            } else if (o1.getDelay() > o2.getDelay()) {
                return 1;
            } else if (o1.getDelay() == o2.getDelay()) {
                return 0;
            }
        }
        return 0;
    }
}
```

Aufgabe 2-3


Blatt 06
3.5.2022
Aufgabe 2)
1) |39|25|62|56|72|45|12|5| normal insert()
39
39 25
25 39
25 39 62
25 39 62 56
25 39 62 56 72
25 39 62 56 72 45
25 39 56 72 45 62
25 39 56 72 45 62 12
12 39 56 72 25 62 45
12 39 56 72 25 62 45 5
5 12 39 72 25 62 45 56


2)
|25|62|56|72|
|45|12|25|62|56|72|39|
heapify: change the order, so that the properties are met!
|25|12|39|62|56|72|45|
|5|25|12|39|62|56|72|45|
Aufgabe 3: Sortieren mit einer Warteschlange
|72|63|55|63|35|96|40|1|
2) Insertion Sort
72	63	55	63	35	96	40	1
72	63	55	63	35	96	40	1
63	72	55	63	35	96	40	1
55	63	72	63	35	96	40	1
55	63	63	72	35	96	40	1
35	55	63	63	72	96	40	1
35	55	63	63	72	96	40	1
35	40	55	63	63	72	96	1
1	35	40	55	63	63	72	96
3) Selection Sort
72	63	55	63	35	96	40	1
1	63	55	63	35	96	40	72
1	35	55	63	63	96	40	72
1	35	40	63	63	96	55	72
1	35	40	55	63	96	63	72
1	35	40	55	63	96	63	72
1	35	40	55	63	63	96	72
1	35	40	55	63	63	72	96
1	35	40	55	63	63	72	96


1) Heap Sort
make max
root to min