Lösningsförslag

Radixsort

U 1.
```
public class RadixSort {
    public static void radixSort(int[] a, int maxNbrOfDigits) {
        LinkedList<Integer> numbers = new LinkedList<Integer>();
        LinkedList<Integer>[] queues =
            (LinkedList<Integer>[]) new LinkedList[10];
        for (int i: a) {
            numbers.add(i);
        }

        for (int i = 0; i < 10; i++) {
            queues[i] = new LinkedList<Integer>();
        }
        int pow = 1;
        for (int i = 1; i <= maxNbrOfDigits; i++)  {
            while (!numbers.isEmpty()) {
                int nbr = numbers.poll();
                int lastDigit = nbr/pow % 10;
                queues[lastDigit].add(nbr);
            }
            for (int j = 0; j < 10; j++) {
                for (int n : queues[j]) {
                    numbers.add(n);
                }
                queues[j].clear();
            }
            pow = pow*10;
        }

        int i = 0;
        while (!numbers.isEmpty()) {
            a[i] = numbers.poll();
            i++;
        }
    }
}
```