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1.
```
public static void collectionMystery4 (ArrayList <Integer> v) {
  for (int i = 1; i < v.size(); i += 2) {
    if (v.get(i-1) >= v.get(i)) {
      v.remove(i);
      v.add(0,0);
    }
  }
  System.out.println(v);
}
```

A) {10, 20, 10, 5}

iterasi	V
1	10, 20, 10, 5
3	0, 10, 20, 10

[1] v.get(0) >= v.get(1)
10 >= 20 salah. berarti tetap.

[3] v.get(2) >= v.get(3)
10 >= 5 benar.
jadi, 5nya diremove
trus tambah 0 di index 0.

jawaban : {0, 10, 20, 10} //

B) {8, 2, 9, 7, -1, 55}

iterasi	V
1	0, 8, 9, 7, -1, 55
3	0, 0, 8, 9, -1, 55
5	0, 0, 8, 9, -1, 55

[1] v.get(0) >= v.get(1)
8 >= 2 benar. jd, 2-nya diremove
trus tambah 0 di index 0.

[3] v.get(2) >= v.get(3)
9 >= 7 benar. 7 diremove, 0 di index 0.

[5] v.get(4) >= v.get(5)
-1 >= 55 salah. jd, tetap.

jawaban :
{0, 0, 8, 9, -1, 55} //

C) {0, 16, 9, 1, 64, 25, 25, 14, 0}

iterasi	V
1	0, 16, 9, 1, 64, 25, 25, 14, 0
3	0, 0, 16, 9, 64, 25, 25, 14, 0
5	0, 0, 0, 16, 9, 64, 25, 14, 0
7	0, 0, 0, 0, 16, 9, 64, 25, 0

(1) v.get(0) >= v.get(1)
0 >= 16 salah. 0 di, tetap.

(3) v.get(2) >= v.get(3)
9 >= 1 benar. 1 diremove, tambahin 0

(5) v.get(4) >= v.get(5)
64 >= 25 benar. 25 remove, tambahin 0.

(7) v.get(6) >= v.get(7)
25 >= 14 benar. 14 diremove tambahin 0 di index 0

jawaban :
{0, 0, 0, 0, 16, 9, 64, 25, 0} //

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2.
```
public static void collectionMystery9 (Queue<Integer> queue, int p) {
    Stack<Integer> stack = new Stack<Integer>();
    int count = 0;
    int size = queue.size();
    for(int i=0; i<size; i++) {
      int element = queue.remove();
      if (element < p) {
        queue.add(element);
      } else {
        count++;
        stack.push(count);
        stack.push(element);
      }
    }
    while (!stack.isEmpty()) {
      queue.add(stack.pop())
    }
    System.out.println(queue);
}
```

A {1,2,3,4,5} p=4

i	count	queue	stack
0	0	2,3,4,5,1	
1	0	3,4,5,1,2	
2	0	4,5,1,2,3	
3	1	5,1,2,3	1,4
4	2	1,2,3	1,4,2,5

ini belum selesai, masih lanjut ke while.

itr 0 → index 0 (1) diremove, lalu di-cek
1 < 4 → benar! jadi kita add (paling belakang)

itr 1 → index yg paling depan diremove, lalu di-cek
2 < 4 → benar. jadi kita add

itr 2 → yg paling depan (3) diremove, bbs itu di-cek
3 < 4 → benar, jadi kita add

itr 3 → (4) diremove, lalu cek 4 < 4 → salah! jadi kita ke else. count-nya nambah, push count sama elemen juga.

itr 4 → (5) diremove, cek 5 < 4 → salah! (else)
tambah count, masukin count sama elemen plg depan ke stack.

while

i	stack	queue
0	1,4,2	1,2,3,5
1	1,4	1,2,3,5,2
2	1	1,2,3,5,2,4
3	0	1,2,3,5,2,4,1

itr 0 → kalo stacknya gk empty, index paling blkg dari stack pindah ke queue plg belakang.
[lanjut terus, sampe stack-nya empty].

jawaban: {1,2,3,5,2,4,1}

B {67,29,115,84,33,71,90} p=50

i	count	queue	stack
0	1	29,115,84,33,71,90	1,67
1	1	115,84,33,71,90,29	1,67
2	2	84,33,71,90,29	1,67,2,115
3	3	33,71,90,29	1,67,2,115,3,84
4	3	71,90,29,33	1,67,2,115,3,84
5	4	90,29,33	1,67,2,115,3,84,4,71
6	5	29,33	1,67,2,115,3,84,4,71,5,90

penjelasan cara sama seperti yang A, lanjut ke while

while

i	queue	stack
0	29,33,90	1,67,2,115,3,84,4,71,5
1	29,33,90,5	1,67,2,115,3,84,4,71
2	29,33,90,5,71	1,67,2,115,3,84,4
3	29,33,90,5,71,4	1,67,2,115,3,84
4	29,33,90,5,71,4,84	1,67,2,115,3
5	29,33,90,5,71,4,84,3	1,67,2,115
6	29,33,90,5,71,4,84,3,115	1,67,2
7	29,33,90,5,71,4,84,3,115,2	1,67
8	29,33,90,5,71,4,84,3,115,2,67	1
9	29,33,90,5,71,4,84,3,115,2,67,1	0

jawaban:

{29,33,90,5,71,4,84,3,115,2,67,1}