

```

before sorting:
33 5 2 1 20 15 3 9 11 7
before: p=0, r=10:    33 5 2 1 20 15 3 9 11 7
  before: p=0, r=5:   33 5 2 1 20
    before: p=0, r=2:  33 5
      before: p=0, r=1: 33
      after:  p=0, r=1: 33
      before: p=1, r=2:  5
      after:  p=1, r=2:  5
    after:  p=0, r=2:   5 33
  before: p=2, r=5:   2 1 20
    before: p=2, r=3:  2
    after:  p=2, r=3:  2
  before: p=3, r=5:   1 20
    before: p=3, r=4:  1
    after:  p=3, r=4:  1
    before: p=4, r=5:  20
    after:  p=4, r=5:  20
  after:  p=3, r=5:   1 20
after:  p=2, r=5:   1 2 20
after:  p=0, r=5:   1 2 5 20 33
before: p=5, r=10:  15 3 9 11 7
  before: p=5, r=7:  15 3
    before: p=5, r=6:  15
    after:  p=5, r=6:  15
    before: p=6, r=7:  3
    after:  p=6, r=7:  3
  after:  p=5, r=7:   3 15
  before: p=7, r=10:  9 11 7
    before: p=7, r=8:  9
    after:  p=7, r=8:  9
  before: p=8, r=10:  11 7
    before: p=8, r=9:  11
    after:  p=8, r=9:  11
    before: p=9, r=10:  7
    after:  p=9, r=10:  7
  after:  p=8, r=10:   7 11
after:  p=7, r=10:   7 9 11
after:  p=5, r=10:   3 7 9 11 15
after:  p=0, r=10:   1 2 3 5 7 9 11 15 20 33
after sorting:
1 2 3 5 7 9 11 15 20 33

```