binarySort(X,0,6)
m=(0+6)/2=4
{2,4,20,22,30,40,50,...}

binarySort(X,0,4)
m=(0+4)/2=2
{4,20,30,40} {2,4,20,22,...}

binarySort(X,0,1)
m=(0+1)/2=0
{4,77} {4,77,98}

binarySort(X,0,0)
→ 4

binarySort(X,1,1)
→ 77

binarySort(X,2,2)
→ 98

binarySort(X,3,4)
m=(3+4)/2=3
{20,30}
→ 30

binarySort(X,3,3)
→ 30

binarySort(X,4,4)
→ 20

$\{77, 77, 98\}$

binarySort(5, 9)
m=(5+9)/2=7
$\{77, 98, 22, 47, 77\}$

binarySort(5, 7)
m=(5+7)/2=6
$\{77, 98, 22\}$

binarySort(8, 9)
m=(8+9)/2=8
$\{47, 77\}$

binarySort(5, 6)
m=(5+6)/2=5
$\{50, 77\}$

binarySort(7, 7)
→22

binarySort(8, 8)
→47

binarySort(9, 9)
→77

binarySort(5, 5)
→50

binarySort(6, 6)
→77

quick(x, 0, 9)

pivot = partition (x, 0, 9)
↪ 1

quick(x, 0, 0)
✗

quick(x, 2, 9)

pivot = p(x, 1, 9)
↪ 9

quick(x, 2, 9)

pivot = p(x, 2, 9)
↪ 8

quick(x, 10, 9)
✗

quick(x, 2, 7)
pivot = p(x, 2, 7)
↪ 7

quick(x, 9, 9)
✗

quick(x, 2, 6)
pivot = p(x, 2, 6)
↪ 3

quick(x, 8, 7)
✗

quick(x, 2, 2)
✗

quick(x, 4, 6)

pivot = p(x, 4, 6)
↪ 4

quick(x, 4, 3)
✗

quick(x, 5, 6)
pivot = p(x, 5, 6)
↪ 6

quick(x, 5, 5)
✗

quick(6, 6)
✗