2.8 22, 15, 26, 44, 10, 3, 9, 13, 29, 25

select
changement

(22) → 15 → 26 → 44 → 10 → (3) → 9 → 13 → 29 → 25

3 (15) → 26 → 44 → 10 → 22 → (9) → 13 → 29 → 25

3 9 (26) → 44 → (10) → 22 → 15 → 13 → 29 → 25

3 9 10 (44) 26 22 15 (13) 29 25

3 9 10 13 (26) 22 (15) 44 29 25

3 9 10 13 15 (22) 26 44 29 25

3 9 10 13 15 22 (26) 44 29 (25)

3 9 10 13 15 22 25 (44) 29 (26)

3 9 10 13 15 22 25 26 (29) 44

3 9 10 13 15 22 25 26 29 (44)

3 9 10 13 15 22 25 26 29 44

Selection Sort

2.9 Insertion Sort

22-15-26-44-10-3-9-13-29-25

22-15-26-44-10-3-9-13-29-25

15-22-26-44-10-3-9-13-29-25

15-22-26-44-10-3-9-13-29-25

15-22-26-44-10-3-9-13-29-25

10-15-22-26-44-3-9-13-29-25

3-10-15-22-26-44-9-13-29-25

3-9-10-15-22-26-44-13-29-25

3-9-10-13-15-22-26-44-29-25

3-9-10-13-15-22-26-29-44-25

3-9-10-13-15-22-25-26-29-44

2-10 worst case sequence

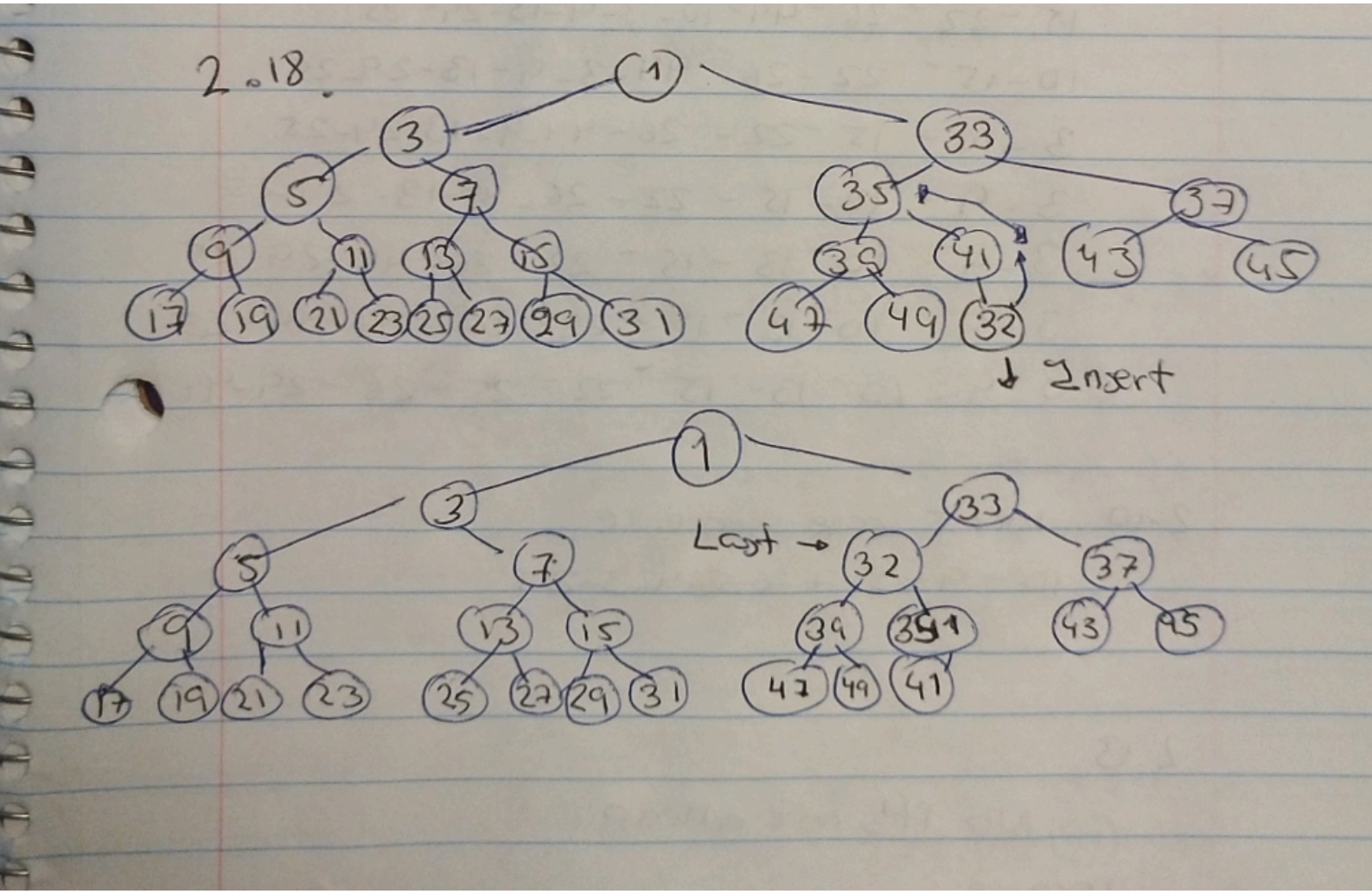
10 - 9 - 8 - 7 - 6 - 5 - 4 - 3 - 2 - 1

2.B.

No pt's. not a heap

because

V(P) ≥ parent (V(P))


2.18.
1
3
33
5
7
35
37
9
11
13
15
39
41
43
45
17
19
21
23
25
27
29
31
47
49
32
Insert
1
3
33
Last
5
7
32
37
9
11
13
15
39
41
43
45
17
19
21
23
25
27
29
31
47
49
41

C-2.32

```
Algorithm reportKeys(T, x)
    S := new Sequence()
    reportKeyHelper(T, x, T.root(), S)
    return S
Algorithm reportKeyHelper(T, x, P, S)
    If T.isExternal(P) then
        return
    If P.element() ≠ x then
        return
    S.insertLast(P.element)
    reportKeyHelper(T, x, T.leftChild(P), S)
    reportKeyHelper(T, x, T.rightChild(P), S).
```