CS1555 hw8
siz11
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4/16/18

4.

```
                        18 | |
                       /        \
              5 | 11 |            30 | |
             /   |    \          /      \
    2 | 4 | → 5 | 8 | 10 → 11 | 15 |    18 | 21 | → 30 | 35 |
```

5.
(a)

```
                        18 | |
                       /        \
              8 | 11 |            30 | |
             /   |    \          /      \
    2 | 4 | → 8 | 10 | → 11 | 15 |    18 | 21 | → 30 | 35 |
```

(b)

```
              8 | 11 | 18
             /   |    \      \
    2 | 4 | → 8 | 10 | → 11 | 15 | → 18 | 21 | 35
```
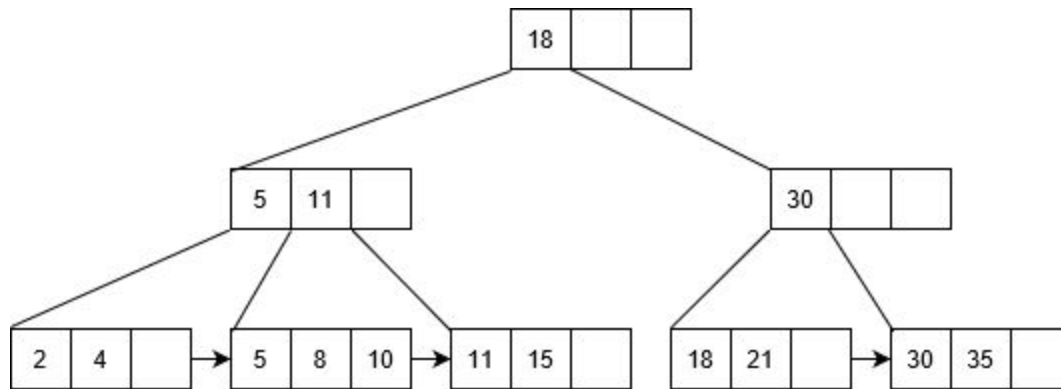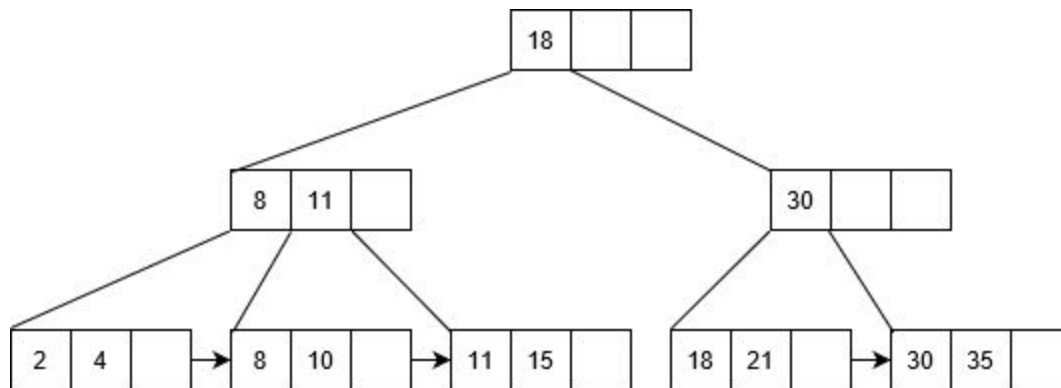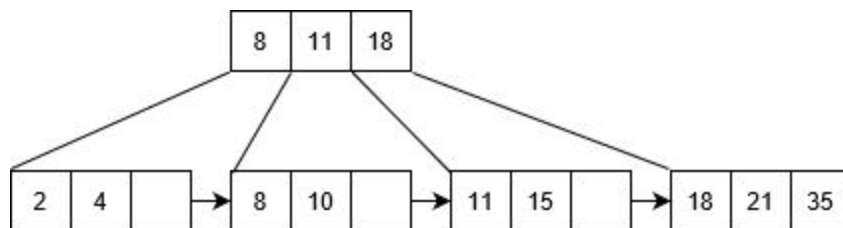
6.
Since the formula for n items with k keys in l levels is l = log(n,k),
And the root is 1 when n is an odd number,
log(7525,9) + 7525%2 = 5 levels