

31.) C $n=2$

①

|

②

2 comparisons, WC

 $n=3$

②

/

|

1

3

2 comparisons, WC

 $n=4$

②

/

|

3

|

④

3 comparisons, WC

 $n=5$

③

/

|

4

|

1

2

5

3 comparisons, WC

 $n=6$

③

/

|

5

|

1

2

4

6

3 comparisons, WC

 $n=7$

④

/

|

6

|

2

1

3

5

7

3 comparisons, WC

 $n=8$

④

/

|

6

|

2

1

3

5

7

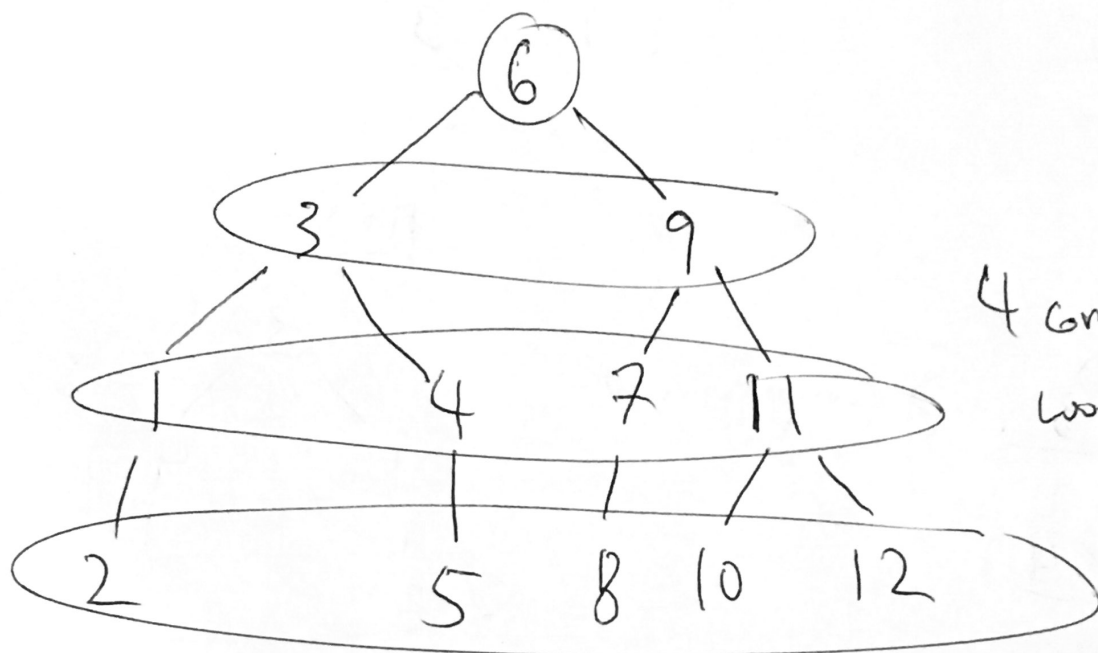
8

4 comparisons, worst case

12

$$n = 12$$

$$1 + \lceil \lg 12 \rceil = 4$$



4 generations,
worst case.