```
        1   2   3   4   5   6   7   8   9   10  11  12  13  14  15  16

(1)     1   2   3  4  5   6  7  8  |  9  10  11  12  13  14  15  16

(2)     1  2   3 4 | 5  6  7 8  |  9  10  11 12  | 13  14  15  16

(3)     1  2 | 3 4 | 5  6 | 7  8 |  9  10 | 11 12 |  13  14 | 15 16 |

(4)     1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
```

Derek Song
APCS 2   pd 8
HW#06 – HOW fast are your turtles?
2018 – 2 –12

```
        1    2    3   4 5  6  7 8  9  10  11  12  13  14  15  16  17

(1)     1    2    3   4  5 6 7 8  | 9  10 11  12  13  14  15  16  17

(2)     1    2   3  4 | 5  6  7 8  | 9  10  11  12 | 13  14  15  16  17

(3)     1   2 | 3 4 | 5  6  | 7 8 |  9  10 | 11  12 ) 13  14  | 15  16 17 |

(4)     1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 7 |
        ⋮   ⋮   ⋮   ⋮   ⋮   ⋮   ⋮   ⋮   ⋮    ⋮    ⋮    ⋮    ⋮    ⋮    ⋮

(5)     1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
```

Still one more split needed

Threshold is 17 !
@ 17 elements, we need 5 "layers"

Theory: The next threshold is 49.
        @ 49 elements, we need 6 "layers"