

0	1	2	3	4	5	6			
1	3	2	4	7	2	8	5	2	

remove - all (data, 2)

First iteration,  $i = 0$ ,  $keep = 0$

$data[i] \neq 2$

$data[keep] = data[i]$

$data[0] = data[0]$

$keep += 1$

Second iteration,  $i = 1$ ,  $keep = 1$

$data[1] = data[1]$

$keep += 1$

Third iteration,  $i = 2$ ,  $keep = 2$

Fourth iteration,  $i = 3$ ,  $keep = 2$

$data[2] = data[3]$

Fifth iteration

$i = 4$ ,  $keep = 3$

$data[3] = data[4]$

Sixth iteration  $i = 5$ ,  $keep = 4$

Seventh iteration  $i = 6$ ,  $keep = 4$

$data[4] = data[6]$

...