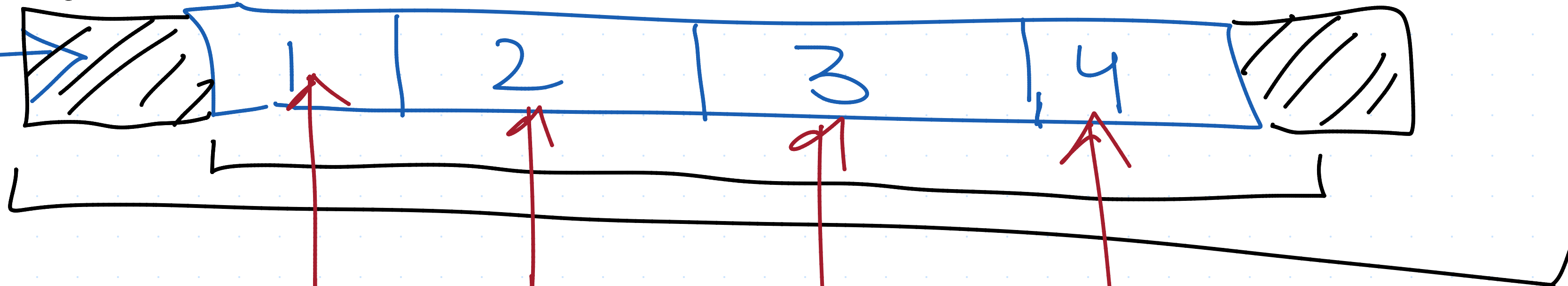


Arrays → Dynamic

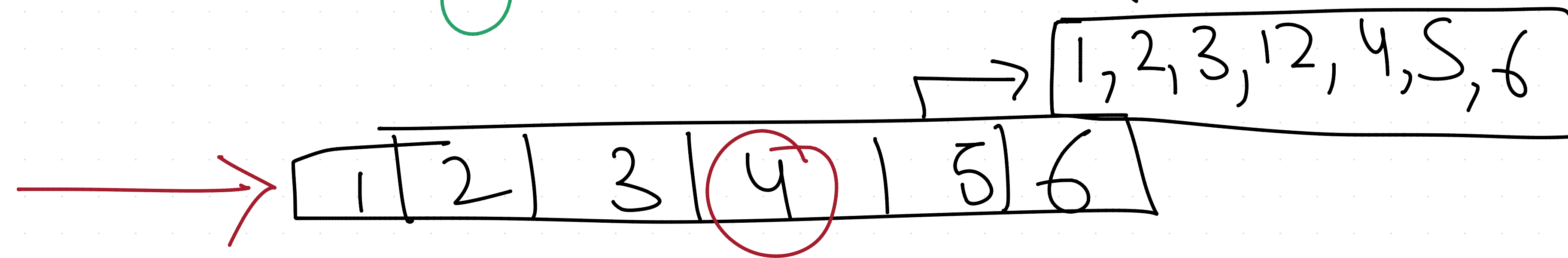
Array

Memory
space



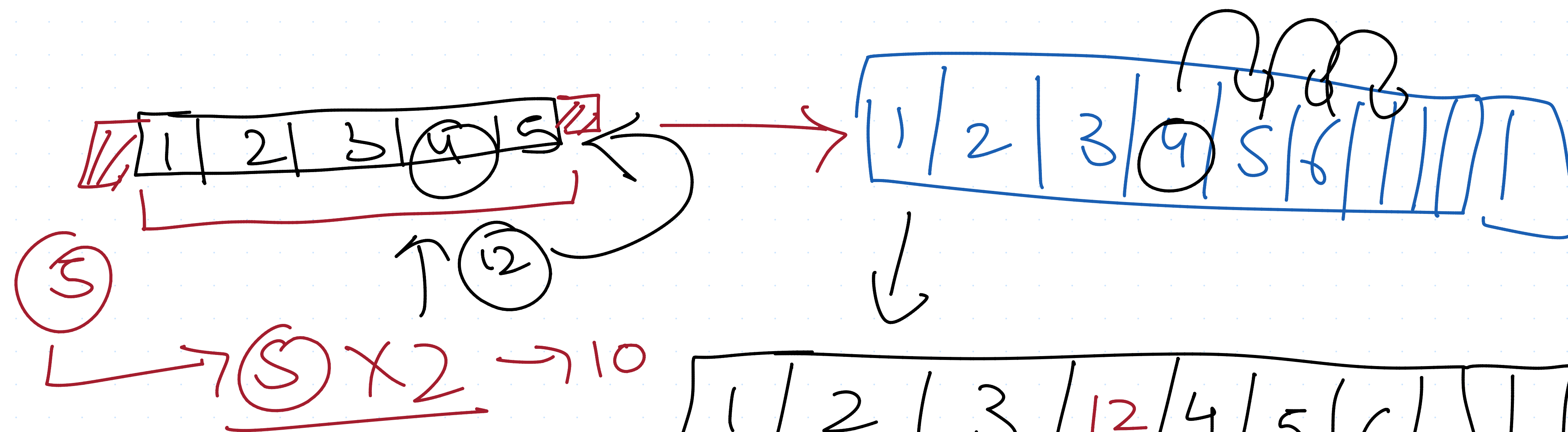
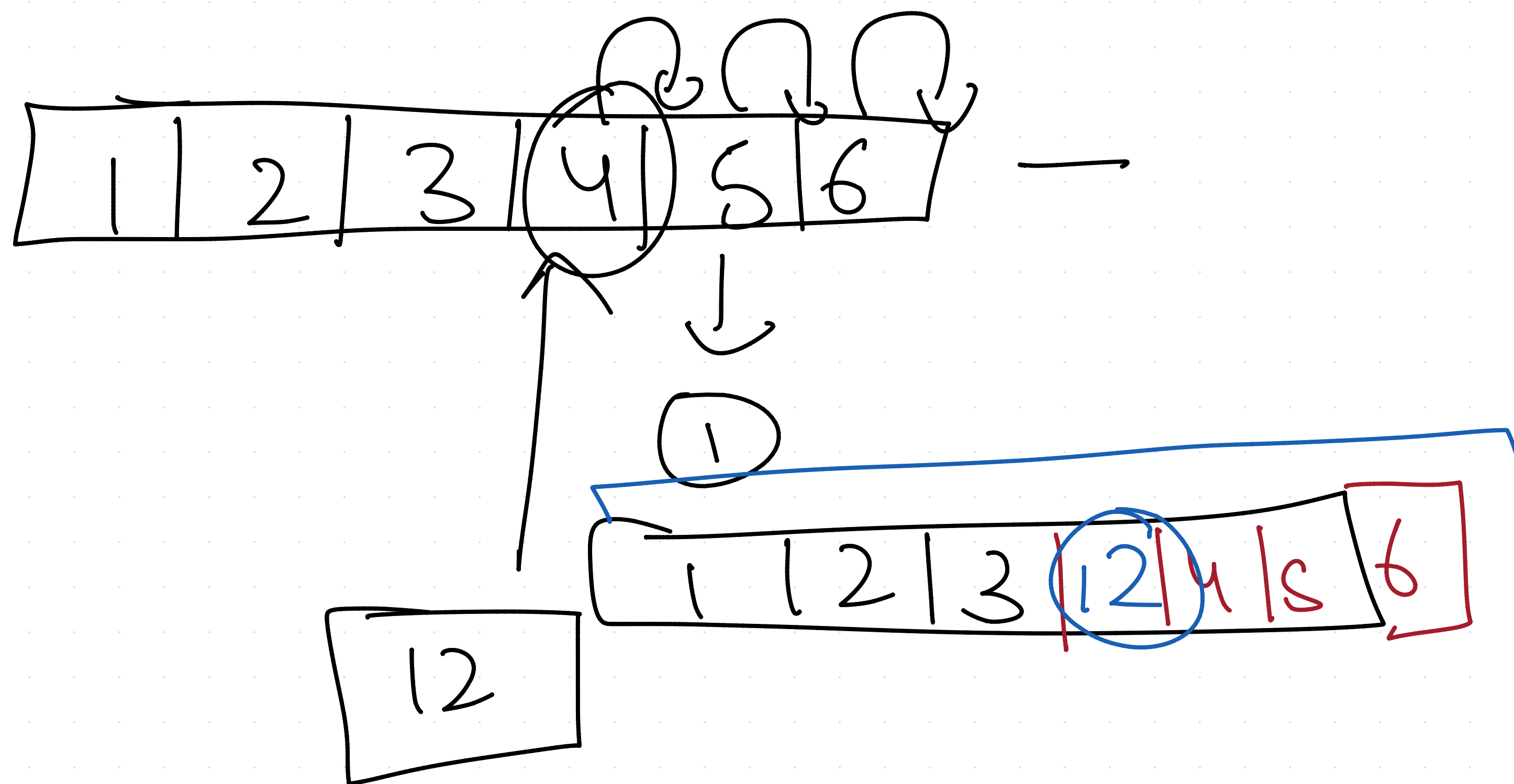
continuous
memory allocation

Time complexity \rightarrow Read
Write

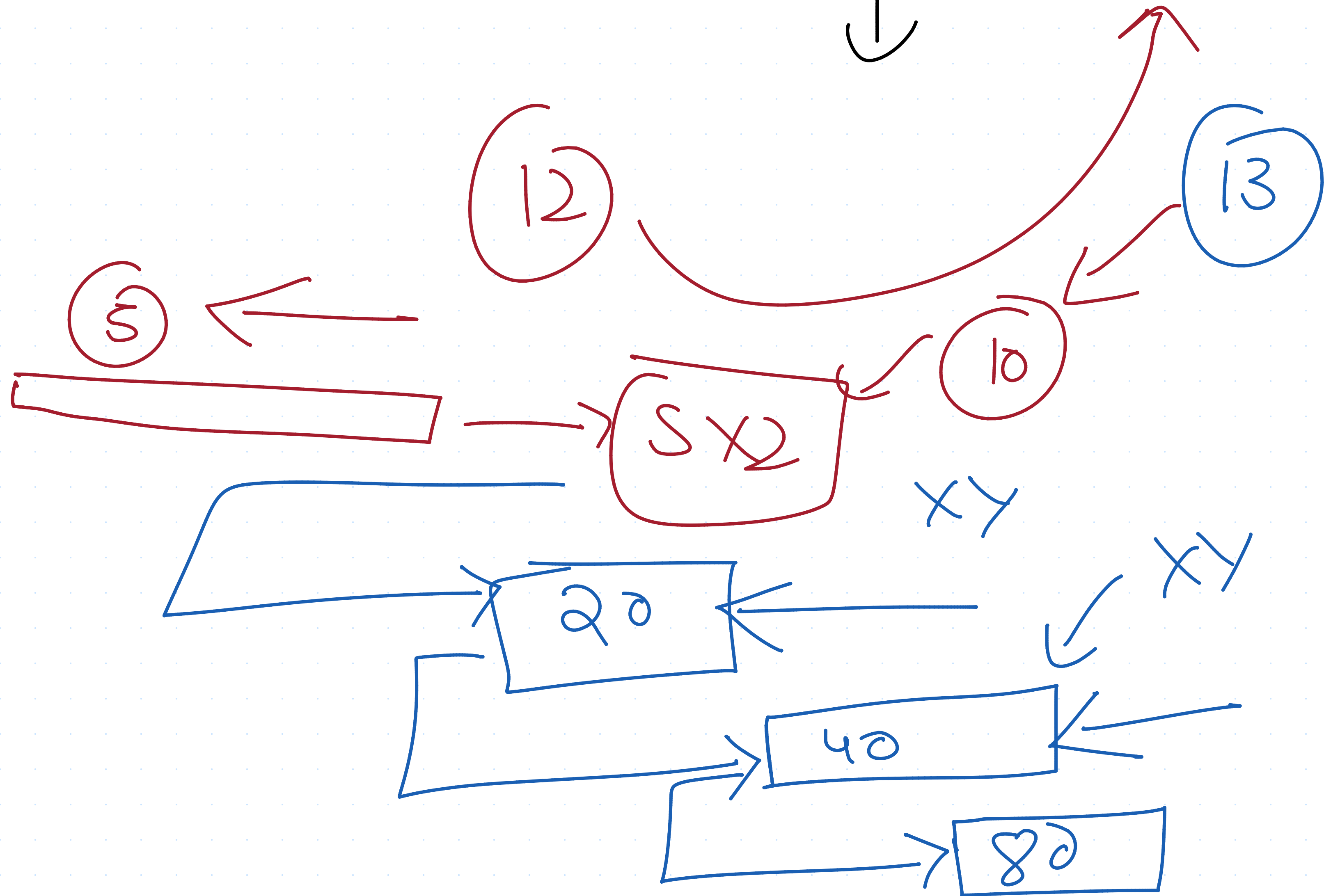
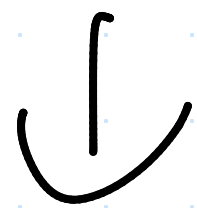


12 \rightarrow 3
count \uparrow \uparrow idx

/

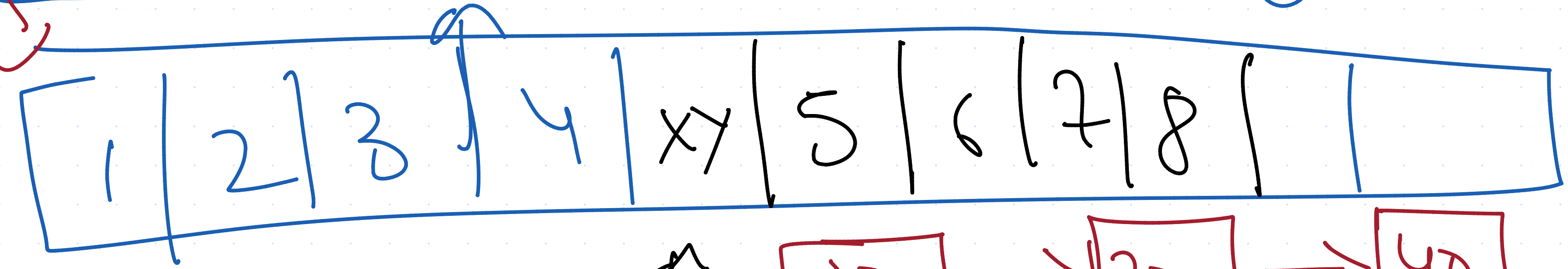


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

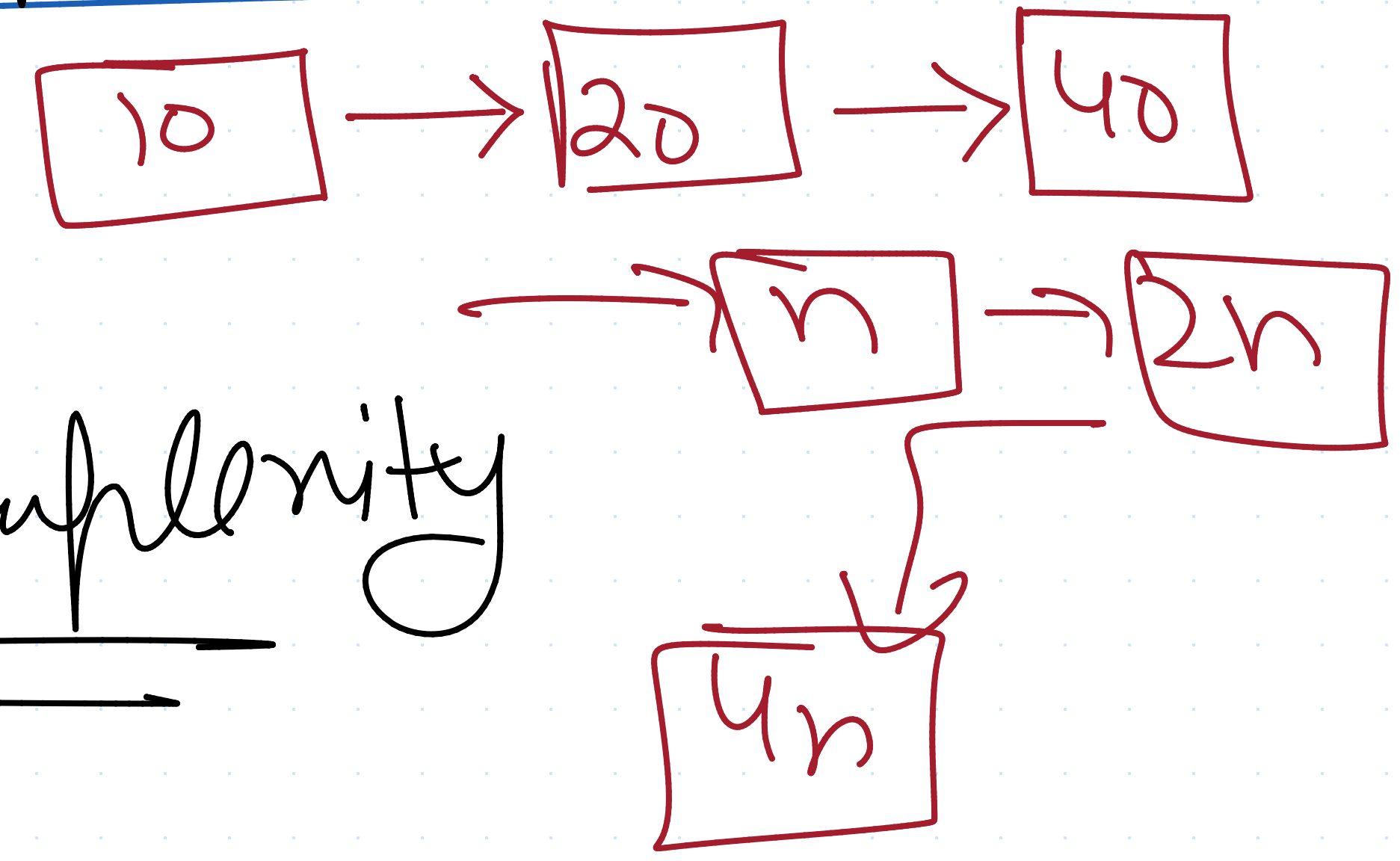




18

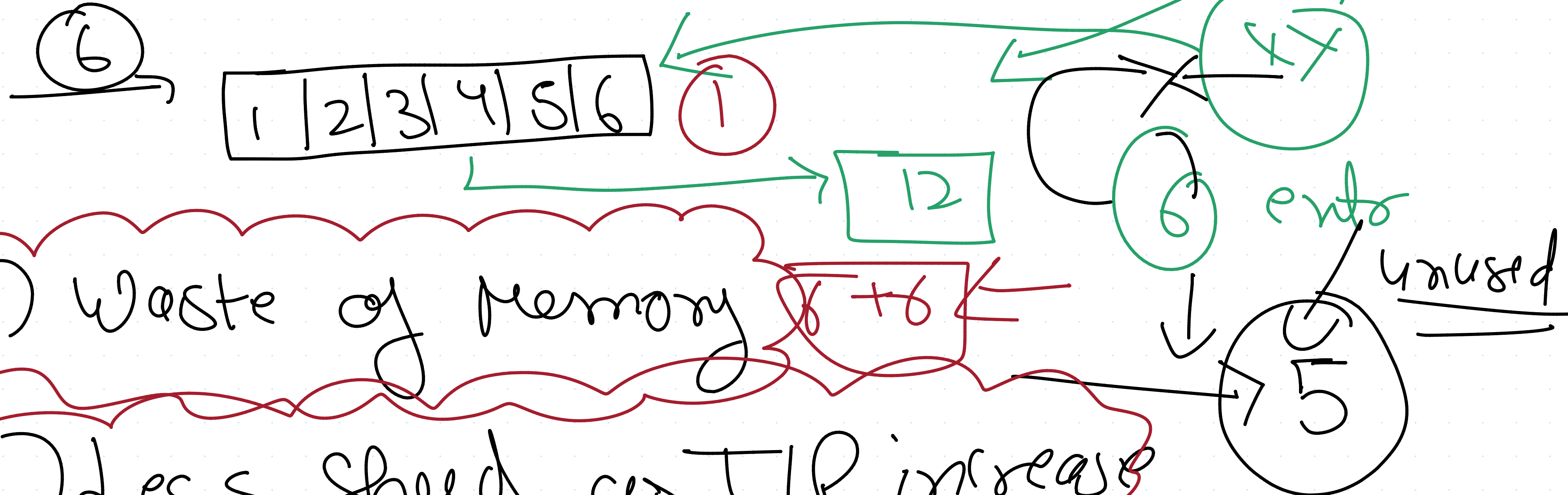


Write



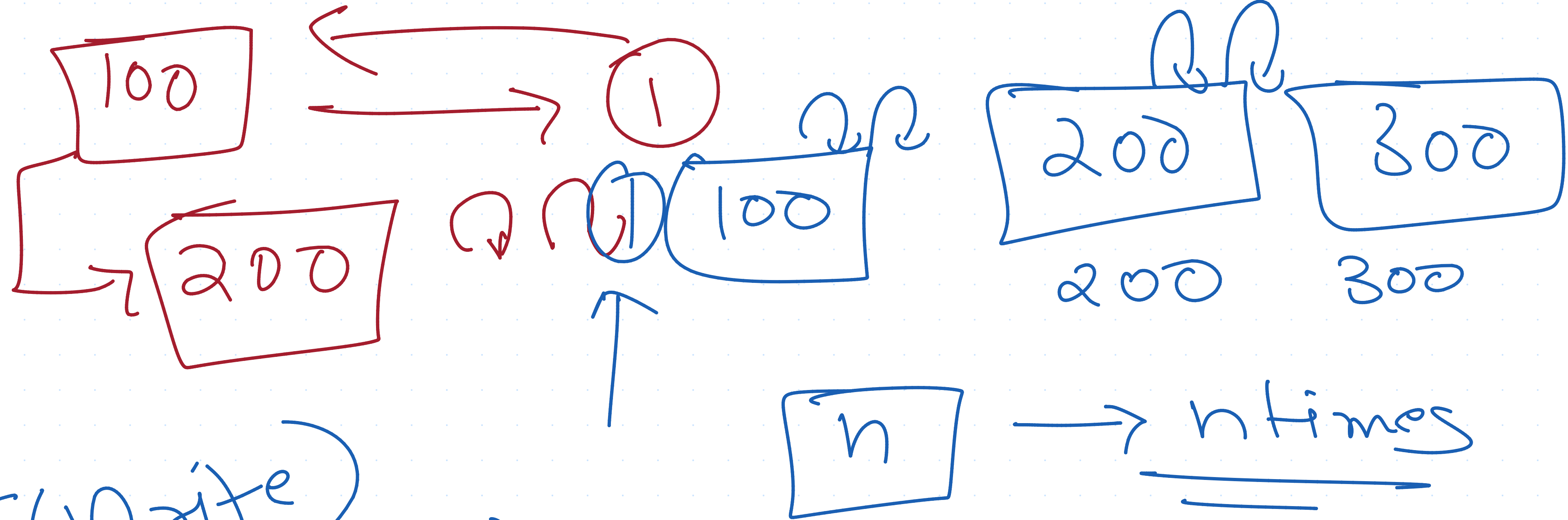
Time Complexity

$O(n)$



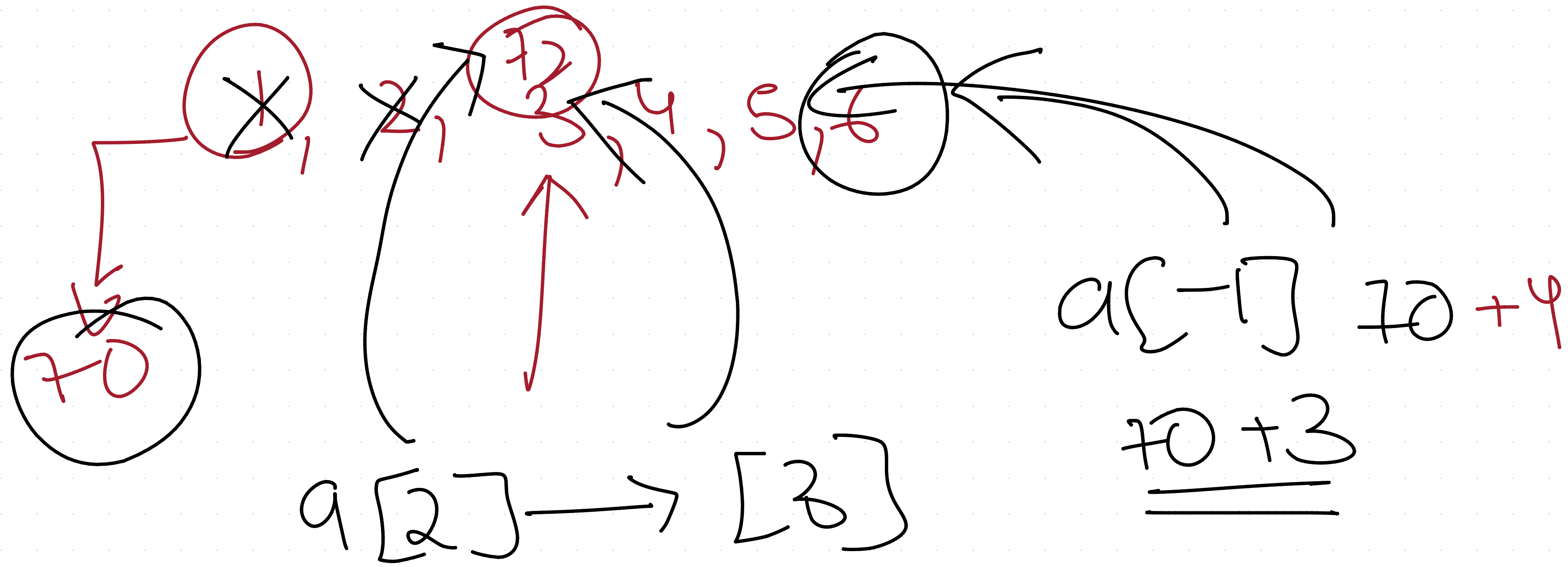
- 1) Waste of memory
- 2) Less speed as I/P increase

$6+1$ $6+2$ $O(n)$



$T(\text{Write}) \rightarrow \underline{\underline{O(n)}}$

Read $\rightarrow O(1)$



Read $\rightarrow O(1)$ \rightarrow Continuous memory
Write $\rightarrow \underline{\underline{O(n)}}$



$$\boxed{100} + 999$$

