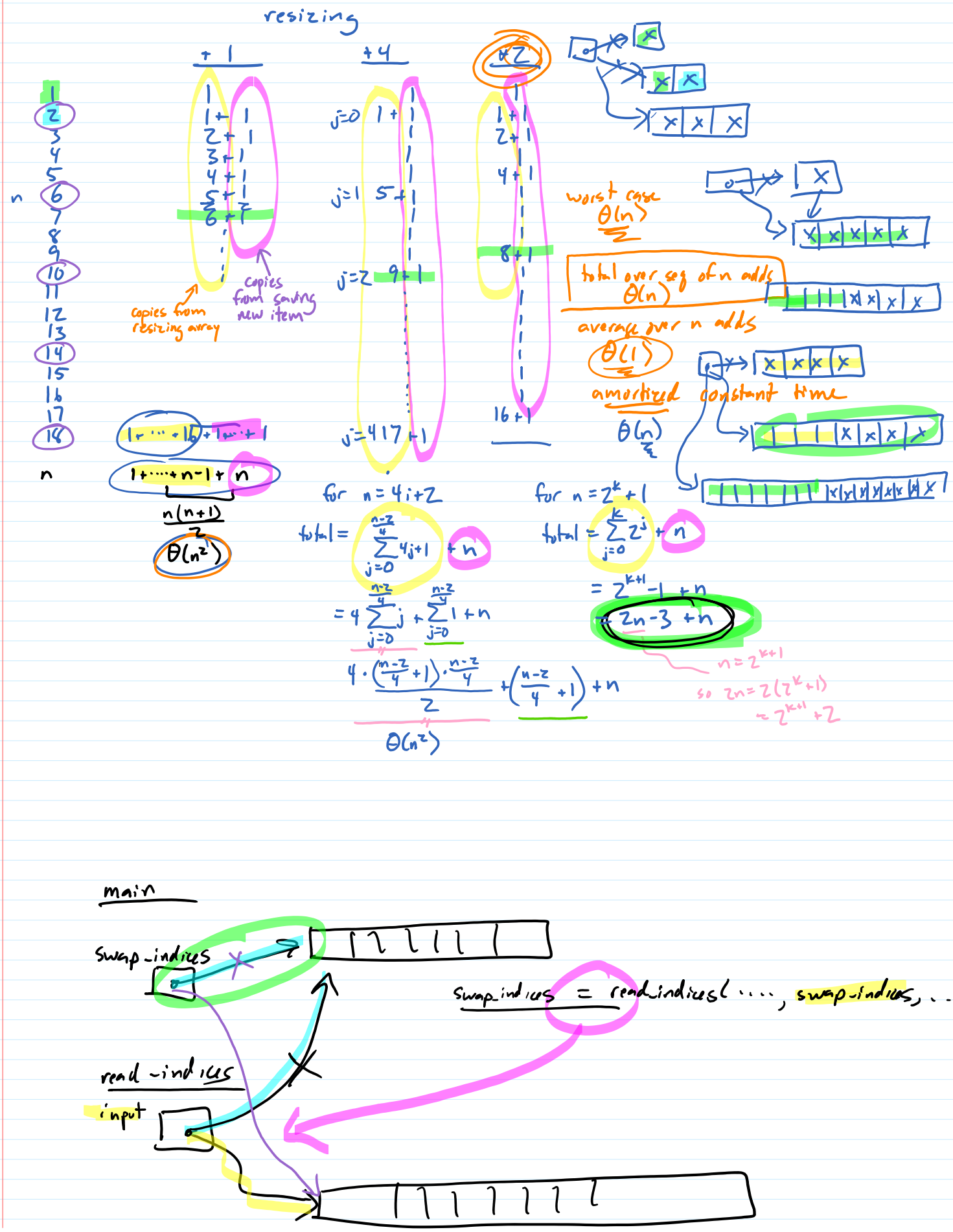
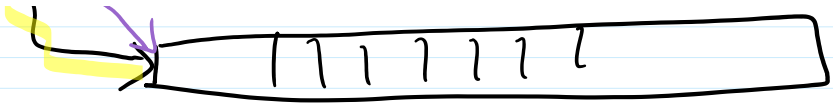

resizing
+1
+4
+Z
copies from resizing array
copies from saving new item
worst case
Θ(n)
total over seq of n adds
Θ(n)
average over n adds
Θ(1)
amortized constant time
Θ(n)
1+···+16+1+···+1
1+····+n-1+n
n(n+1)/2
Θ(n²)
for n = 4i+2
total = Σ_{j=0}^{(n-2)/4} 4j+1 + n
= 4 Σ_{j=0}^{(n-2)/4} j + Σ_{j=0}^{(n-2)/4} 1 + n
4·((n-2)/4+1)·((n-2)/4)/2 + ((n-2)/4+1) + n
Θ(n²)
for n = 2^k + 1
total = Σ_{j=0}^{k} 2^j + n
= 2^{k+1} - 1 + n
= 2n - 3 + n
n = 2^{k+1}
so 2n = 2(2^k+1)
= 2^{k+1} + 2

main
swap_indices
read_indices
input
swap_indices = read_indices(..., swap_indices, ...)



return input