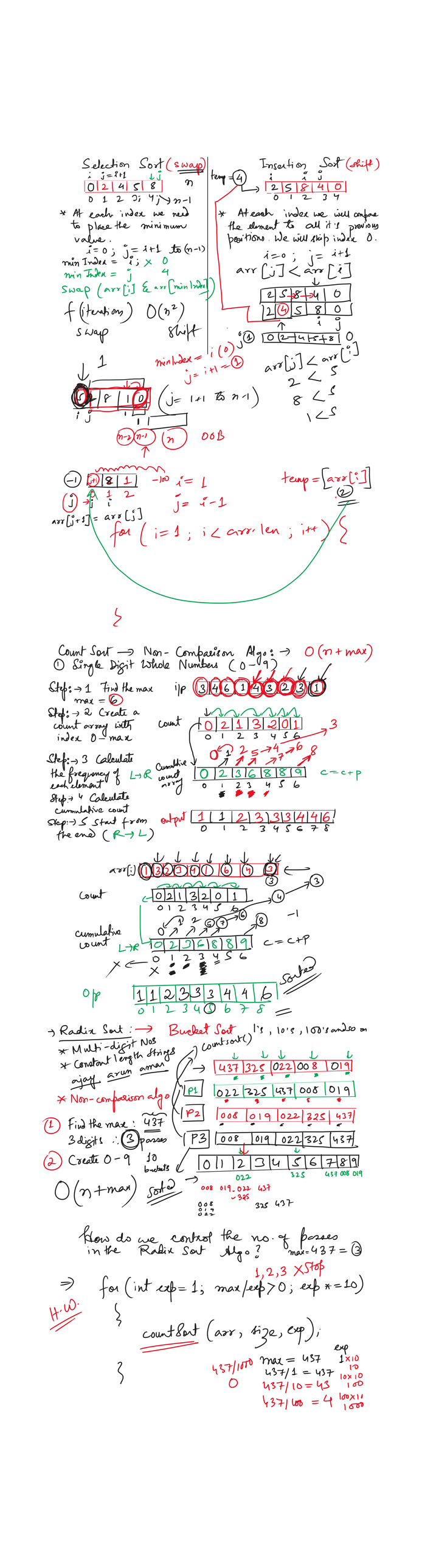
Selection Sort (swap)
Insertion Sort (shift)
* At each index we need to place the minimum value.
* At each index we will compare the element to all it's previous positions. We will skip index 0.
f (iterations) O(n²)
swap
shift
Count Sort → Non-Comparison Algo: → O(n+max)
① Single Digit Whole Numbers (0-9)
Step:→ 1 Find the max
Step:→ 2 Create a count array with index 0-max
Step:→ 3 Calculate the frequency of each element
Step→ 4 Calculate cumulative count
Step:→ 5 start from the end (R→L)
count
cumulative count array
output
Radix Sort :→ Bucket Sort
* Multi-digit Nos
* Constant length strings
ajay arun aman
* Non-comparison algo
countSort()
O(n+max)
sorted
How do we control the no. of passes in the Radix Sort Algo?
max=437=③
1,2,3 X Stop
for (int exp=1; max/exp>0; exp*=10)
countSort (arr, size, exp);
H.W.