

$$[0] = 5 > [j] \quad [1] = 8$$

$$[3] = 3 \quad [2] = 7$$

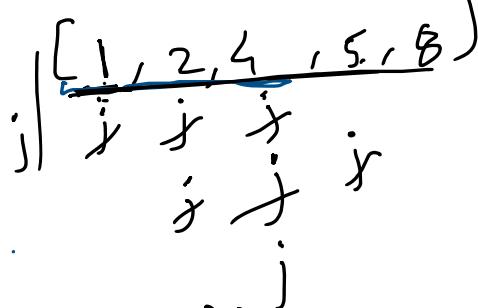
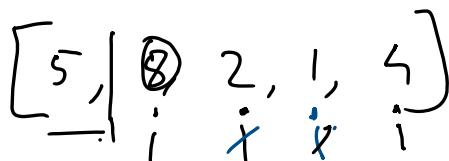
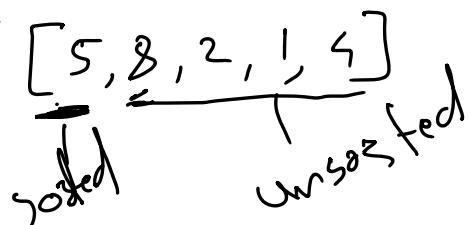
$$[4] = 1 > [j] \quad [3] = 3$$

$$[2] = 7$$

$$\begin{aligned} i &= 0 \\ \underline{\text{current}} &= \underline{i} \underline{3} \cancel{8} \\ j &= i+1 \\ &= \cancel{i} \underline{3} \end{aligned}$$

$$\begin{aligned} [3] &= 7 \\ [4] &= 5 \\ [4] &= 7 \end{aligned}$$

insertion sort



(8)

(2)

(1)

(4)

for ($\text{int } i = i ; i < \text{arr.length}; i++$) {

 key = arr[i]

 j = i - 1;

 while ($j \geq 0 \text{ } \& \& \text{ arr}[j] > \text{key}$) {

 arr[j + 1] = arr[j];

 j = j - 1;

}

$\text{arr}[j+1] = \text{key}$

}