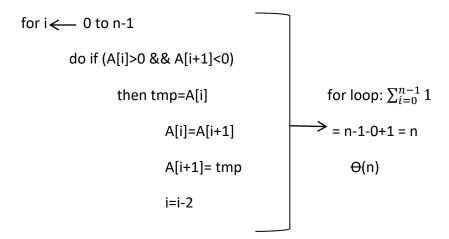
Alg separatePosNNeg(A[0.....n-1]) // non_recursive



Func separatePosNNeg(A, I, r){ // recursive

$$| if(l==r) \{ \\ return l; \longrightarrow c/1 \}$$

$$else \{ \\ separatePosNNeg(A, l, floor(l+r)/2) \longrightarrow T(n/2) \\ separatePosNNeg(A, floor(l+r)/2+1, r) \longrightarrow T(n/2) \\ for i \longleftarrow 0 \text{ to } n-1 \\ do if (A[i]>0 && A[i+1]< \\ tmp=A[i] \\ A[i]=A[i+1] \\ A[i+1]= tmp \\ i=i-2 \}$$

$$for loop: \sum_{i=0}^{n-1} 1 = n-1-0+1 = n$$

Comparison:

	best	worst	stable	Serial/parallel	Memory usage
Non recursive	n	n	Yes	serial	In-place
Recursive	n	n	Yes	parallel	Out-place