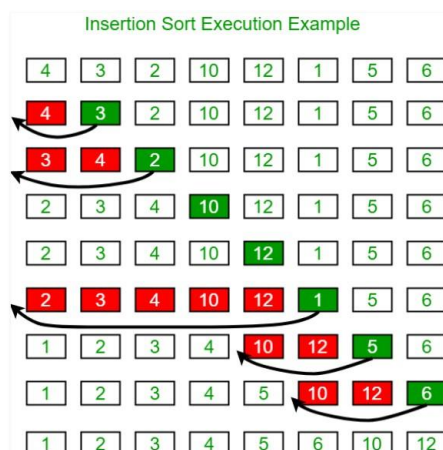


BUBBLESORT

i = 0	j	0	1	2	3	4	5	6	7
	0	5	3	1	9	8	2	4	7
	1	3	5	1	9	8	2	4	7
	2	3	1	5	9	8	2	4	7
	3	3	1	5	9	8	2	4	7
	4	3	1	5	8	9	2	4	7
	5	3	1	5	8	2	9	4	7
	6	3	1	5	8	2	4	9	7
i = 1	j	0	1	2	3	4	5	6	7
	0	3	1	5	8	2	4	7	9
	1	1	3	5	8	2	4	7	
	2	1	3	5	8	2	4	7	
	3	1	3	5	8	2	4	7	
	4	1	3	5	2	8	4	7	
	5	1	3	5	2	4	8	7	
i = 2	j	0	1	2	3	4	5	6	7
	0	1	3	5	2	4	7	8	
	1	1	3	5	2	4	7		
	2	1	3	5	2	4	7		
	3	1	3	2	5	4	7		
	4	1	3	2	4	5	7		
i = 3	j	0	1	2	3	4	5	6	7
	0	1	3	2	4	5	7		
	1	1	3	2	4	5			
	2	1	2	3	4	5			
	3	1	2	3	4	5			
i = 4	j	0	1	2	3	4	5	6	7
	0	1	2	3	4	5			
	1	1	2	3	4				
	2	1	2	3	4				
i = 5	j	0	1	2	3	4	5	6	7
	0	1	2	3	4				
	1	1	2	3					
i = 6	j	0	1	2	3	4	5	6	7
	0	1	2	3					
	1	1	2						
	2	1							

INSERTION



Another Example:

12, 11, 13, 5, 6

Let us loop for $i = 1$ (second element of the array) to 4 (last element of the array)

$i = 1$. Since 11 is smaller than 12, move 12 and insert 11 before 12

11, 12, 13, 5, 6

$i = 2$. 13 will remain at its position as all elements in $A[0..1]$ are smaller than 13

11, 12, 13, 5, 6

$i = 3$. 5 will move to the beginning and all other elements from 11 to 13 will move one position ahead of their current position.

5, 11, 12, 13, 6

$i = 4$. 6 will move to position after 5, and elements from 11 to 13 will move one position ahead of their current position.

5, 6, 11, 12, 13

SELECTION

arr[] = 64 25 12 22 11

// Find the minimum element in arr[0...4]

// and place it at beginning

11 25 12 22 64

// Find the minimum element in arr[1...4]

// and place it at beginning of arr[1...4]

11 12 25 22 64

// Find the minimum element in arr[2...4]

// and place it at beginning of arr[2...4]

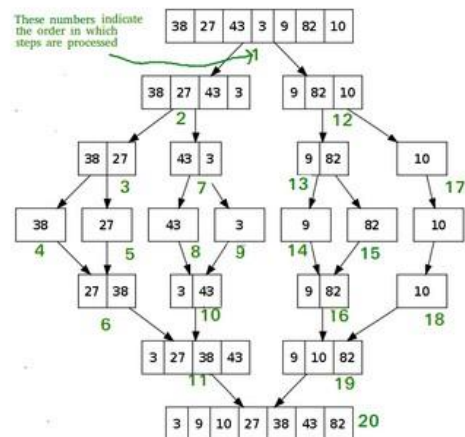
11 12 22 25 64

// Find the minimum element in arr[3...4]

// and place it at beginning of arr[3...4]

11 12 22 25 64

MERGE



QUICK

Quide (sista som pivot)



ABCDEFGHIJ

Insättning

G|CAEJHBFI D
 C G|AEJHBFI D
 A C G|EJHBFI D
 A C E G|JHBFI D
 Slutet är ordert och början
 är sorterad.

Urval

G C A E J H B F I D
 A C G E J H B F I D
 A B C G E J H F I D
 A B C E J H G F I D
 A B C D J H G F I E
 D = lägsta ligger sorterade först

Bubbel

G C A E J H B F I D
 C G A E J H B F I D
 C A G E J H B F I D
 C A E G J H B F I D
 C A E G H J B F I D
 Framförallt G, men även J
 har skjutits längre bak.
 Dock svårt att se då
 varvet inte är färdigt - testa

Quick (1:a som pivot)

G C A E J H B F I D
 G C A E B H J F I D
 G C A E B F J H I D
 G C A E B F D H I J
 D C A E B F G H I J
 Alla lägre än G ligger till vänster
 och alla högre ligger till höger