xIzpiši sled naraščajočega urejanja zaporedja (streightinsertion, streightselection, bubblesort, bubblesort1)

3 6 1 4 2 5 3

N.V.: (navadno vstavljanje)  
3 6 1 4 2 5 3 -> 3 | 6(t) 1 4 2 5 3 (sklepamo da je levo od “|” urejeni del) -> 3 6 | 1(t) 4 2 5 3 (2M 1 C)  
-> 1 3 6 | 4(t) 2 5 3 (4M 2C) -> 1 3 4 6 | 2(t) 5 3 (3M 2C) -> 1 2 3 4 6 | 5(t) 3 (5M 3C) -> 1 2 3 4 5 6 | 3(t) (4M 4C) -> 1 2 3 4 5 6 | … urejeno

D.V.: (dvojiško vstavljanje; izpis je isti kot pri navadnem vstavljanju, le število primerjav je log2(n))

N.I.: (navadno izbiranje)  
Zapomnimo si index na katerem je najmanjši element (i = 2)  
3 |6 1(i) 4 2 5 3 (3M, 6C)  
1 | 6 3 4 2(i) 5 3 (3M, 5C)  
1 2 | 4 3(i) 6 5 3 (3M, 4C)  
1 2 3 | 4 6 5 3(i) (3M, 3C)  
1 2 3 3| 6 5 4(i) (3M, 2C)  
1 2 3 3 4 | 6 5(i) (3M, 1C)  
1 2 3 3 4 5 | 6(i) (0M 1C)  
1 2 3 3 4 5 6 … urejeno

N.Z.: (navadna zamenjava; bubble sort)  
3 6 1 4 2 | 5 3 (3M, 1C)  
3 6 1 4 | 2 3 | 5 (0M, 1C)  
3 6 1 | 4 2 | 3 5 (3M, 1C)  
3 6 | 1 2 | 4 3 5 (0M, 1C)  
3 | 6 1 | 2 4 3 5 (3M, 1C)  
| 3 1 | 6 2 4 3 5 (3M, 1C)  
1 3 6 2 4 | 3 5 (0M, 1C)  
1 3 6 2 | 4 3 | 5 (3M, 1C)  
1 3 6 | 2 3 | 4 5 (0M, 1C)  
1 3 | 6 2 | 3 4 5 (3M, 1C)  
1 | 3 2 | 6 3 4 5 (3M, 1C)  
| 1 2 | 3 6 3 4 5 (0M, 1C)  
1 2 3 6 3 | 4 5 (0M, 1C)  
1 2 3 6 | 3 4 | 5 (0M, 1C)  
1 2 3 | 6 3 | 4 5 (3M, 1C)  
1 2 | 3 3 | 6 4 5 …  
1 2 3 3 6 | 4 5 (0M, 1C)  
1 2 3 3 | 6 4 | 5 (3M, 1C)  
1 2 3 | 3 4 | 6 5 …  
1 2 3 3 4 | 6 5 (3M, 1C)  
1 2 3 3 | 4 5 | 6 …  
1 2 3 3 4 5 6 … urejeno

Shaker sort (kombinacija bubble sort iz obeh strani)  
3 6 1 4 2 5 3 (<-)  
1 |3 6 4 2 5 3 (->)  
1 | 3 4 2 5 3 | 6 (<-)  
1 2 | 3 3 4 5 | 6 (->)  
1 2 | | 3 3 4 5 6 … urejeno

Text

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i = 0:   
3 | 6 1 4 2 5 3   
6 | 3 1 4 2 5 3 (3M, 6C)

i = 1:  
6 3 | 1 4 2 5 3   
6 4 | 1 3 2 5 3  
6 5 | 1 3 2 4 3  
6 5 | 1 3 2 4 3 (6M, 5C)

i = 2:  
6 5 1 | 3 2 4 3   
6 5 3 | 1 2 4 3  
6 5 4 | 1 2 3 3 (6M, 4C)

i = 3:  
6 5 4 1 | 2 3 3   
6 5 4 2 | 1 3 3  
6 5 4 3 | 1 2 3 (6M, 3C)

i = 4:  
6 5 4 3 1 | 2 3  
6 5 4 3 2 | 1 3  
6 5 4 3 3 | 1 2 (6M, 2C)

i = 5:  
6 5 4 3 3 1 | 2   
6 5 4 3 3 2 | 1 (3M, 1C)

6 5 4 3 3 2 1 … urejeno

C: Cmin = Cmax = Cavg

C = ∑cici =∑1 = n – 1 – i

DOLOČI FORMULI ZA ŠTEVILO PREMIKOV IN PRIMERJAV!

A picture containing text

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Za rekurzijo, globalni števci!

Shellovo urejanje:

k0 = 1;  
ki = 2 \* ki-1 + 1;

3 8 5 1 7 4 6 2 3 9 4 3 8 1 5 2

k0 = 1, k0 = 3, k2 = 7, k3 = 15, k4 = 31

3 8 5 1 7 4 6 2 3 9 4 3 8 1 5 2 -> 2 8 5 1 7 4 6 2 3 9 4 3 8 1 5 3 (k3 = 15) n2 … n2 / 15

2 8 5 1 7 4 6 2 3 9 4 3 8 1 5 3 -> 2 3 5 1 3 4 1 2 3 9 4 7 8 6 5 8 (k2 = 7) n2 … n2 / 7

2 3 5 1 3 4 1 2 3 9 4 7 8 6 5 8 -> 1 2 3 1 3 5 2 3 5 8 4 5 8 6 7 9 (k1 = 3) n2 … n2 / 3

1 1 2 2 … (k0 = 1) n2 … n2

n1.39