

# Trabalho Teórico 7

## Unidade IV: Ordenação Interna - Shellsort

### Slide C.

Mostre todas as comparações e movimentações do algoritmo anterior para o array abaixo:

12	4	8	2	14	17	6	18	10	16	5	15	13	9	1	11	7	3
----	---	---	---	----	----	---	----	----	----	---	----	----	---	---	----	---	---

Before Shell Sort

Vector

{12,4,8,2,14,17,6,18,10,16,15,5,13,9,1,11,7,3}

|Key|-----9-----|

Compare -> 12<- ->9

|Key|-----1-----|

Compare -> 4<- ->1

|Key|-----11-----|

Compare -> 8<- ->11

|Key|-----7-----|

Compare -> 2<- ->7

|Key|-----3-----|

Compare -> 14<- ->3

Vector

{9,1,8,2,3,17,6,18,10,16,15,5,13,12,4,11,7,14}

|Key|-----3-----|

Compare -> 9<- ->3

|Key|-----10-----|

Compare -> 9<- ->10

|Key|-----13-----|

Compare -> 10<- ->13

|Key|-----7-----|

Compare -> 13<- ->7

Compare -> 10<- ->7

Compare -> 9<- ->7

Compare -> 3<- ->7

|Key|-----17-----|

Compare -> 1<- ->17

|Key|-----16-----|

Compare -> 17<- ->16

Compare -> 1<- ->16

|Key|-----12-----|

Compare -> 17<- ->12

Compare -> 16<- ->12

Compare -> 1<- ->12

|Key|-----14-----|

Compare -> 17<- ->14

Compare -> 16<- ->14

Compare -> 12<- ->14

|Key|-----6-----|

Compare -> 8<- ->6

|Key|-----15-----|

Compare -> 8<- ->15

|Key|-----4-----|

Compare -> 15<- ->4

Compare -> 8<- ->4

Compare -> 6<- ->4

|Key|-----18-----|

Compare -> 2<- ->18

|Key|-----5-----|

Compare -> 18<- ->5

Compare -> 2<- ->5

|Key|-----11-----|

Compare -> 18<- ->11

Compare -> 5<- ->11

Vector

{3,1,4,2,7,12,6,5,9,14,8,11,10,16,15,18,13,17}

|Key|-----1-----|  
 Compare -> 3<- ->1  
 |Key|-----4-----|  
 Compare -> 3<- ->4  
 |Key|-----2-----|  
 Compare -> 4<- ->2  
 Compare -> 3<- ->2  
 Compare -> 1<- ->2  
 |Key|-----7-----|  
 Compare -> 4<- ->7  
 |Key|-----12-----|  
 Compare -> 7<- ->12  
 |Key|-----6-----|  
 Compare -> 12<- ->6  
 Compare -> 7<- ->6  
 Compare -> 4<- ->6  
 |Key|-----5-----|  
 Compare -> 12<- ->5  
 Compare -> 7<- ->5  
 Compare -> 6<- ->5  
 Compare -> 4<- ->5  
 |Key|-----9-----|  
 Compare -> 12<- ->9  
 Compare -> 7<- ->9  
 |Key|-----14-----|  
 Compare -> 12<- ->14  
 |Key|-----8-----|  
 Compare -> 14<- ->8  
 Compare -> 12<- ->8  
 Compare -> 9<- ->8  
 Compare -> 7<- ->8  
 |Key|-----11-----|  
 Compare -> 14<- ->11  
 Compare -> 12<- ->11  
 Compare -> 9<- ->11  
 |Key|-----10-----|  
 Compare -> 14<- ->10  
 Compare -> 12<- ->10  
 Compare -> 11<- ->10  
 Compare -> 9<- ->10  
 |Key|-----16-----|  
 Compare -> 14<- ->16  
 |Key|-----15-----|  
 Compare -> 16<- ->15  
 Compare -> 14<- ->15  
 |Key|-----18-----|  
 Compare -> 16<- ->18

|Key|-----13-----|  
 Compare -> 18<- ->13  
 Compare -> 16<- ->13  
 Compare -> 15<- ->13  
 Compare -> 14<- ->13  
 Compare -> 12<- ->13  
 |Key|-----17-----|  
 Compare -> 18<- ->17  
 Compare -> 16<- ->17  
 Vector  
 {1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18}

After Shell Sort

Vector  
 {1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18}

