

Code	temporal	espacial
public void sortByNombreAtoZ() {	0	0
refreshArrayList();	$O(1)$	0
Client clientTmp;	1	1
for(int i = 0; i < clientsToSort.size(); i++) {	$n+1$	1
for(int j = 1; j < (clientsToSort.size() - i); j++) {	$n(n+1)/2$	1
if(clientsToSort.get(j-1).getName().compareTo(clientsToSort.get(j).getName())	$(n(n+1)/2)-n$	0
clientTmp = clientsToSort.get(j-1);	$(n(n+1)/2)-n$	1
clientsToSort.set(j - 1, clientsToSort.get(j));	$(n(n+1)/2)-n$	1
clientsToSort.set(j, clientTmp);	$(n(n+1)/2)-n$	1
}		
}		
}		
}		
Total	$O(n^2)=((5n^2)/2)-(n/2)+3$	$6=O(1)$
Code	temporal	espacial
public void sortByStartDate() {	0	0
refreshArrayList();	$O(1)$	0
Client[] b = new Client[clientsToSort.size()];	1	n
for(int i=0;i<b.length;i++) {	$n+1$	1
b[i] = clientsToSort.get(i);	n	1
}	0	0
mergeSort(b);	$O(n\log n)$	$O(n)$
clientsToSort.clear();	$O(1)$	0
for(Client tmp:b) {	$n+1$	1
clientsToSort.add(tmp);	n	0
}		
Total	$n \log(n)+ 4n+5$	$O(n)+n+3= O(n)$

Code	temporal	espacial
public void sortByValue() {		
refreshArrayList();	$O(1)$	0
Client[] b = new Client[clientsToSort.size()];	1	n
for(int i=0;i<b.length;i++) {	n+1	1
b[i] = clientsToSort.get(i);	n	0
}		
quickSort(b,0,b.length-1);	$O(n \log n)$	$O(\log n)$
clientsToSort.clear();	1	0
for(Client tmp:b) {	n+1	1
clientsToSort.add(tmp);	n	0
}		
Total	$n \log(n) + 4n + 5$	$\log n + n + 2$
Code	temporal	espacial
public void sortByCC() {		
refreshArrayList();	$O(1)$	0
MinHeap<Client> a = new MinHeap<Client>(100);	1	$O(n)$
for(Client tmp:clientsToSort) {	n+1	1
a.insert(tmp);	n	1
}		0
a.minHeap();	$O(n \log n)$	$O(1)$
clientsToSort.clear();	1	0
int size = a.size();	1	1
for(int i=0;i<size;i++) {	n+1	1
clientsToSort.add(a.extractMin());	n	0

}		
}		
Total	$(n \log n) + 4n + 6$	$n + 5 = O(n)$
public void minHeap() {		
for (int pos = (size/2)-1; pos >= 0; pos--) {	$(n/2) + 1$	1
minHeapify(pos);	$(n \log n)/2$	0
}		
}		
Total	$((n \log n + n)/2) + 1 = O(n \log n)$	$O(1)$