```
// arr[dp] in this version of Quicksort is always in sorted position
// If dp - 1 == low, then arr[low] is also in sorted position
// If dp + 1 == high, then arr[high] is also in sorted position
// These latter two scenarios are represented by purple coloured text

arr = { 7, 2, 3, -5, 3, 5, 2, 4, 1 }
Quicksort(arr, 0, 8) {
        int pivot = arr[0] = 7, dp = 8
        arr = { 1, 2, 3, -5, 3, 5, 2, 4, 7 }
        Quicksort(arr, 0, 7) {
                int pivot = arr[0] = 1, dp = 1;
                arr = { -5, 1, 3, 2, 3, 5, 2, 4, 7 }
                Quicksort(arr, 0, 0) { }
                Quicksort(arr, 2, 7) {
                        int pivot = arr[2] = 3, dp = 4;
                        arr = { -5, 1, 2, 2, 3, 5, 3, 4, 7 }
                        Quicksort(arr, 2, 3) {
                                int pivot = arr[2] = 2, dp = 2;
                                arr = { -5, 1, 2, 2, 3, 5, 3, 4, 7 }
                                Quicksort(arr, 2, 2) { }
                                QuickSort(arr, 3, 3) { }
                        }
                        Quicksort(arr, 5, 7) {
                                int pivot = arr[5] = 5, dp = 7;
                                arr = { -5, 1, 2, 2, 3, 4, 3, 5, 7 }
                                Quicksort(arr, 5, 6) {
                                        int pivot = arr[5] = 4, dp = 6;
                                        arr = { -5, 1, 2, 2, 3, 3, 4, 5, 7 }
                                        Quicksort(arr, 5, 5) { }
                                        Quicksort(arr, 7, 6) { }
                                }
                                Quicksort(arr, 8, 7) { }
                        }
                }
        }
        Quicksort(arr, 9, 8) { }
}


arr = { 53, 12, 98, 63, 18, 32, 80, 46, 72, 21 }
Quicksort(arr, 0, 9) {
        int pivot = arr[0] = 53, dp = 5;
        arr = { 21, 12, 18, 32, 46, 53, 80, 98, 72, 63 }
        Quicksort(arr, 0, 4) {
                int pivot = arr[0] = 21, dp = 2;
                arr = { 18, 12, 21, 32, 46, 53, 80, 98, 72, 63 }
                Quicksort(arr, 0, 1) {
                        int pivot = arr[0] = 18, dp = 1;
                        arr = { 12, 18, 21, 32, 46, 53, 80, 98, 72, 63 }
                        Quicksort(arr, 0, 0) { }
                        Quicksort(arr, 2, 1) { }
                }
                Quicksort(arr, 3, 4) {
                        int pivot = arr[3] = 32, dp = 3;
                        arr = { 12, 18, 21, 32, 46, 53, 80, 98, 72, 63 }
                        Quicksort(arr, 3, 2) { }
                        Quicksort(arr, 4, 4) { }
                }
        }
        Quicksort(arr, 6, 9) {
                int pivot = arr[6] = 80, dp = 8;
                arr = { 12, 18, 21, 32, 46, 53, 63, 72, 80, 98 }
                Quicksort(arr, 6, 7) {
                        int pivot = arr[6] = 63, dp = 6;
                        arr = { 12, 18, 21, 32, 46, 53, 63, 72, 80, 98 }
                        Quicksort(arr, 6, 5) { }
                        Quicksort(arr, 7, 7) { }
                }
                Quicksort(arr, 9, 9) { }
        }
}
```