Having an issue with sorting strings and reals. Integers sort as expected but the others two enter an infinite loop with the example ["goodbye","c is the best","hello","please compile","0"] and [2.6, 1.5, 3.8, 1.9]. Any ideas?

The algorithm is guaranteed to succeed. It could be possible you are not following how to move items from the queues/stack. Have you tried adding some print statements stating which action is taken and maybe add some places where you wait for input?

What does it do for the integers [26, 15, 38, 19]