You are given a list of ships. This list is in a random order. In your working life you will find that sorting lists into a useful order is very common. It will be useful in your Battleship Bots assignment. You can sort the ships in nearest order, health order or some combination of both.

A description of how different sorting algorithms work

<http://www.youtube.com/watch?v=Jdtq5uKz-w4&list=PL2_aWCzGMAwKedT2KfDMB9YA5DgASZb3U>

An overview of different sorting algorithms. Different algorithms perform differently. If you are sorting very large amounts of data then you must use an efficient sort algorithm. You however are sorting a very small amount of information so I recommend that you use the one that is the easiest to code.

<http://www.youtube.com/watch?v=kPRA0W1kECg>

The following links to videos will give you a better idea of how different sort algorithms work. You may find these videos helpful. You may find these videos unhelpful. You will find these videos different!

Bubble Sort

<http://www.youtube.com/watch?v=lyZQPjUT5B4>

Shell Sort

<http://www.youtube.com/watch?v=CmPA7zE8mx0>

Select Sort

<http://www.youtube.com/watch?v=Ns4TPTC8whw>

Insert Sort

<http://www.youtube.com/watch?v=ROalU379l3U>

Quick Sort

<http://www.youtube.com/watch?v=ywWBy6J5gz8>

 Don't forget that you have swapped numbers in arrays before. Look back at assignment 1.