Specifications

You have recently learnt of a design pattern called the Strategy Pattern; which allows you to swap the behaviours associated with an object during run-time. You are required to do the following:

- Create a console application which will allow data sets to be entered as individual objects. This requires that you create a class called DataSet.
- Each DataSet should have
    - A name
    - Contain a list of integers.
    - Have the ability to sort the list of integers using a specific sorting behavior.
    - Have the ability to output the list of integers using a specific output behavior.
    - The sorting and output behavior should be changeable during run-time.
- Your program needs to include at least 4 data sets. You may hard code the entries for the data sets, i.e. you do not need to ask the user to enter the values for the data set.
- You are required to include *at least* 2 sorting algorithms as **Sorting** behaviours.
- You are required to include 2 output behaviours as **Output** behaviours. The 2 output behaviours should be
    - Horizontal: e.g. 1,2,3,4,5,6
    - Vertical: e.g.
    1
    2
    3
    4
    5
    6
    7
- Your program needs to demonstrate both **Sorting** and **Output** behaviours as well as show that it is possible to substitute behaviours during run-time.