

Question 4:

A journal on PCs would like to investigate some properties of different PCs, e.g. the price, performance, etc. The results need to be sorted in a list. There are several sorting algorithms for sorting all the PCs depending on specific characteristics. These sorting algorithms behave differently with respect to the time and space performance. Therefore, it is required to select and switch to a different sorting algorithm at run-time.

Which design pattern would be suitable for this problem?

Solution:

In this assignment, an array of PC needs to be sorted according to a given property. Thus, different sort functions need to be utilized and selected at run-time.

Here a version of **factory pattern** would prove to be useful where we only provide the property according to which we would like to sort, as a parameter and rest is taken care of by the class function.