Hw5-Question 3

3. Explore on the Internet what can Python package pysort offers Software Developers when writing a program. If any, describe how to use it and give some program examples.

A. pysort is one of the most thoroughly used packages by software developers. There are dozens of different sorting implementations and applications that you can use to make your code more efficient and effective.

Usage of sorting to solve a wide range of problems:

- **Searching:** Searching for an item on a list works much faster if the list is sorted.
- **Selection:** Selecting items from a list based on their relationship to the rest is easier with sorted data. For example, finding the *kth*-largest or smallest value or the median value of the list is much easier when the values are ascending or descending order.
- **Duplicates:** Finding duplicate values on a list can be done very quickly when the list is sorted.
- **Distribution:** Analyzing the frequency distribution of items on a list is very fast if the list is sorted. For example, finding the element that appears most or least often is relatively straightforward with a sorted list.