

Sergio E. Garcia Tapia

Algorithms by Sedgewick and Wayne (4th edition) [SW11]

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3.5: Applications

Exercise 1. Implement `SET` and `HashSet` as "wrapper class" clients of `ST` and `HashST`, respectively (provide dummy values and ignore them).

Solution. See `com.segarciat.algs4.ch3.sec5.ex01`.

Exercise 2. Develop a `SET` implementation by starting with the code for `SequentialSearchST` and eliminating all the code involving values.

Solution. See `com.segarciat.algs4.ch3.sec5.ex02`.

Exercise 3. Develop a `SET` implementation `BinarySearchSET` by starting with the code for `BinarySearchST` and eliminating all the code involving values.

Solution. See `com.segarciat.algs4.ch3.sec5.ex03`.

Exercise 4. Develop classes `HashSTint` and `HashSTdouble` for maintaining sets of keys of primitive `int` and `double` types, respectively. (Convert generics to primitive types in the code of `LinearProbingHashST`).

Solution. See `com.segarciat.algs4.ch3.sec5.ex04`.

References

- [SW11] Robert Sedgewick and Kevin Wayne. *Algorithms*. 4th ed. Addison-Wesley, 2011.
ISBN: 9780321573513.