

Study Guide

- lists: slices, list catenation, access and update (mutate); tuples (immutable)
- map, reduce, lambda, recursion, function call trace (stack)
 - Be able to draw trace of function calls
- tail recursion using an extra argument to accumulate a result
- use it or lose it idea
- memoization
- dictionaries: access, check if key in the dictionary, .keys() returns list of keys
- boolean functions: expression from table, table from expression
- binary arithmetic, two's complement
- memory representation of data: as references to memory holding values, shallow and deep copy
 - Be able to draw box-and-arrows diagrams
- imperative control structure: for- and while-loops
- trace a loop (table of iterations)
- object-oriented programming: class, object, constructor, subclass and inheritance;