

Topics for second partial - problems list

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9. "Higher order functions" - function can take other function as an argument; `lambda` expression to create an unnamed function in-line.
 - Practice problems 2, problem 3
 - Practice problems 3, problem 2
10.
 - QuickSort (Practice problems 2, problem 1)
 - Basic classes; creation of a class, `__init__` method, fields and method, an object of a class. (Practice problems 4, problem 1)
11. Interaction:
 - Plotting things using `matplotlib.pyplot` library (Practice problems 1, problem 2)
 - Opening files and reading/writing data from/to files. (Practice problems 4, problem 1)
12.
 - Backtracking technique: Sudoku solver.
 - Practice problems 1, problem 3
 - Practice problems 2, problem 3
 - Practice problems 3, problem 3
 - Implementation of a graph algorithm: DFS.
 - Practice problems 1, problem 1
 - Practice problems 2, problem 2
 - Practice problems 3, problem 1
13. Graph algorithms:
 - Kruskal's algorithm for minimum spanning tree (Practice problems 4, problem 2)
 - Dijkstra's algorithm.
14. Hash map implementation. Built-in python data structures: `dict` for dictionary, `set` for set.
(Practice problem 3, problem 3)