1. Start with std::map.
2. Present .doc document. Talk about red black trees.
3. Show visualization of red black tree online.
4. Go to code:
5. Show Interface of a map.
6. Show how template arguments can be adjusted for map.
7. Ask class where can we find more comparison functions (<http://en.cppreference.com/w/cpp/header/functional>)
8. Give class exercise one (counting occurrences).
9. Give class exercise two (iteration)
10. Give class exercise three (constructors)
11. std::multimap.
12. Show in code the only difference with std::map – that multiple keys are allowed.
13. std::set & std::multiset
14. Say that difference between set and map is that set holds only keys, and map holds key – value.
15. In code: Show usages of set and map.
16. std::unordered\_map
17. Present .doc document. Talk about hash table.
18. Show visualization of hash table online.
19. Go to code:
20. Present basic interface.
21. Present advanced interface.
22. std::array
23. In code: Present differences between C++11 array and C-style array.
24. std::deque
25. Present .doc document. Talk about examples of usage.
26. Go to code:
27. Present Interface.
28. std::queue
29. Show pictures in .doc document.
30. Go to code:
31. Present Interface
32. Give exercise (constructors)
33. std::stack