STL for C++

Resources:

Tutorials:
https://www.topcoder.com/community/competitive-programming/tutorials/power-up-c-with-the-standard-template-library-part-1/

https://www.topcoder.com/community/competitive-programming/tutorials/power-up-c-with-the-standard-template-library-part-2/

http://www.cplusplus.com/

https://www.hackerearth.com/practice/notes/standard-template-library/

Problems:

https://www.hackerearth.com/challenges/competitive/code-monk-c-stl/problems/

https://www.hackerrank.com/domains/cpp?filters%5Bsubdomains%5D%5B%5D=stl

https://codeforces.com/problemset/problem/782/A

https://codeforces.com/problemset/problem/22/A

https://codeforces.com/problemset/problem/704/A

https://codeforces.com/problemset/problem/4/C

https://codeforces.com/problemset/problem/546/C

https://codeforces.com/problemset/problem/799/B

https://codeforces.com/contest/733/problem/D

https://codeforces.com/problemset/problem/1180/c

https://codeforces.com/contest/1225/problem/B1

https://codeforces.com/contest/1225/problem/B2

Learning Resources:

- **Asymptotic analysis (Big-O notation)**
  - Basic
    - youtube.com - Time complexity of a computer program
    - youtube.com - Big-O notation in 5 minutes - The basics
    - youtube.com - Definition Of Big O Notation - Intro to Theoretical Computer Science
    - youtube.com - Algorithms Lecture 1 -- Introduction to asymptotic notations
    - iarcs.org.in - Measuring the efficiency of algorithms
    - interactivepython.org - Particularly for Big-O notation
  - Advanced
    - rob-bell.net - A beginner's guide to Big O notation
    - youtube.com - Big O Notation, Gayle Laakman McDowell
    - web.mit.edu - Big O notation
    - youtube.com - Time and space complexity analysis of recursive programs - using factorial
    - A very nice tutorial with examples
  - Practice Problems

        - Check some MCQs on space and time complexity here.
        - You can see some problems with solutions here: Time complexity of an algorithm

- **Arrays**
    - Resources
        - codechef.com - Data Structure Tutorial: Array
        - cs.cmu.edu - Arrays
        - geeksforgeeks.org - Arrays Data Structure
    - Practice Problems
        - codechef.com - LECANDY, editorial
        - codechef.com - CNOTE, editorial ;
        - codechef.com - SALARY, editorial
        - codechef.com - CHN15A, editorial
        - codechef.com - RAINBOWA, editorial
        - codechef.com - FRGTNLNG, editorial
        - codechef.com - COPS, editorial
- **Strings**
    - Resources
        - tutorialspoint.com - C++ strings
        - guru99.com - Java strings
        - docs.python.org - Python strings
        - tutorialspoint.com - Python strings
        - geeksforgeeks.org - Many string questions
    - Practice Problems
        - codechef.com - CSUB, editorial

        - codechef.com - LAPIN, editorial
- **Stack and Queue**
    - Resources
        - geeksforgeeks.org - Stack Data Structure
        - geeksforgeeks.org - Introduction and Array Implementation
        - tutorialspoint.com - Data Structures Algorithms
        - cs.cmu.edu - Stacks
        - cs.cmu.edu - Stacks and Queues
        - cs.cmu.edu - Stacks and Queues
    - Practice Problems
        - spoj.com - JNEXT
        - spoj.com - STPAR
        - spoj.com - ONP
        - codechef.com - COMPILER
        - spoj.com - MMASS
        - spoj.com - HISTOGRA
        - codeforces.com - D. Maximum Xor Secondary
        - spoj.com - ANARC09A
        - codeforces.com - C. Minimal string
        - codeforces.com - B. Alternating Current
        - codeforces.com - C. Longest Regular Bracket Sequence

- **Heaps (priority queue)**
    - Resources
        - cs.cmu.edu
        - eecs.wsu.edu
        - geeksforgeeks.org
        - visualgo.net

        - iarcs.org.in
    - Practice Problems
        - codechef.com - IPCTRAIN, editorial
        - codechef.com - ANUMLA, editorial
        - codechef.com - KSUBSUM, editorial
        - codechef.com - RRATING, editorial
        - codechef.com - TSECJ05, editorial
        - spoj.com - WEIRDFN
        - codechef.com - CAPIMOVE, editorial
        - spoj.com - RMID2
        - spoj.com - LAZYPROG
        - spoj.com - EXPEDI
        - acm.timus.ru
        - baylor.edu - Maze Checking and Visualization
        - codechef.com - MOSTDIST, editorial