* 복잡도 분석
* 수학을 활용한 문제풀이
* 규칙 찾기
  + <http://usaco.org/index.php?page=viewproblem2&cpid=667> (2016 Dec S 2번)
  + <http://usaco.org/index.php?page=viewproblem2&cpid=620> (2016 Feb S 3번)
  + <http://usaco.org/index.php?page=viewproblem2&cpid=739> (2017 US S 2번)
  + <http://usaco.org/index.php?page=viewproblem2&cpid=990> (2020 Jan S 1번)
  + <https://www.acmicpc.net/problem/13305> (2016 KOI 중등부 2번 : 주유소)
* 재귀적 풀이 (관계 중심적 사고)
  + 리니어 서치, 바이너리 서치
  + Binary Search 활용
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=765~~](http://usaco.org/index.php?page=viewproblem2&cpid=765) ~~(2017 Dec G 1번) :: 어려운 버전~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=858~~](http://usaco.org/index.php?page=viewproblem2&cpid=858) ~~(2018 Dec S 1번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=715~~](http://usaco.org/index.php?page=viewproblem2&cpid=715) ~~(2017 Feb S 2번) :: DP로도 풀 수 있음~~
    - <http://usaco.org/index.php?page=viewproblem2&cpid=690> (2017 Jan S 1번) :: check 과정에서 Priority Queue 사용
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=991~~](http://usaco.org/index.php?page=viewproblem2&cpid=991) ~~(2020 Jan S 2번) :: 수학적 개념 조금 사용~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=992~~](http://usaco.org/index.php?page=viewproblem2&cpid=992) ~~(2020 Jan S 3번)~~
  + 팩토리얼, 피보나치
  + Palindrome 판별, AnBn 판별
  + 조합 (Combination), S(n,k), P(n,k)
  + Kth Smallest Element
  + 하노이 타워
  + N Queen 문제
  + 재귀함수 사용
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=692~~](http://usaco.org/index.php?page=viewproblem2&cpid=692) ~~(2017 Jan S 3번)~~
* 재귀 (다이나믹 프로그래밍)
  + ~~행렬 경로 문제~~
  + ~~돌 놓기~~
  + ~~RGB 거리~~ [~~https://www.acmicpc.net/problem/1149~~](https://www.acmicpc.net/problem/1149)
  + ~~가장 긴 증가하는 부분수열~~ [~~https://www.acmicpc.net/problem/11053~~](https://www.acmicpc.net/problem/11053)
  + ~~LCS~~ [~~https://www.acmicpc.net/problem/9251~~](https://www.acmicpc.net/problem/9251)
  + [~~http://usaco.org/index.php?page=viewproblem2&cpid=863~~](http://usaco.org/index.php?page=viewproblem2&cpid=863) ~~(2018 Dec G 3번)~~
  + ~~이차원 공간에서의 DP (~~[~~http://usaco.org/index.php?page=viewproblem2&cpid=923~~](http://usaco.org/index.php?page=viewproblem2&cpid=923)~~) &~~ [~~http://usaco.org/index.php?page=viewproblem2&cpid=915~~](http://usaco.org/index.php?page=viewproblem2&cpid=915) ~~(2019 Feb S2번)~~
  + ~~Knapsack~~ [~~https://www.acmicpc.net/problem/12865~~](https://www.acmicpc.net/problem/12865) ~~( \*\* greedy version의 fraction knapsack도 소개해주자 : 규칙 찾기에 ?)~~
  + ~~어려운 DP~~
    - [~~https://www.acmicpc.net/problem/10835~~](https://www.acmicpc.net/problem/10835) ~~(KOI 중등부 2015 3번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=897~~](http://usaco.org/index.php?page=viewproblem2&cpid=897) ~~(2019 Jan G 1번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=815~~](http://usaco.org/index.php?page=viewproblem2&cpid=815) ~~(2018 Feb G 3번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=791~~](http://usaco.org/index.php?page=viewproblem2&cpid=791) ~~(2018 Jan G 3번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=766~~](http://usaco.org/index.php?page=viewproblem2&cpid=766) ~~(2017 Dec G 2번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=718~~](http://usaco.org/index.php?page=viewproblem2&cpid=718) ~~(2017 Feb G 2번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=694~~](http://usaco.org/index.php?page=viewproblem2&cpid=694) ~~(2017 Jan G 1번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=670~~](http://usaco.org/index.php?page=viewproblem2&cpid=670) ~~(2016 Dec G 2번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=574~~](http://usaco.org/index.php?page=viewproblem2&cpid=574) ~~(2015 Dec G 2번) :: Knapsack의 아이디어 활용 문제 (0-1 knapsack)~~
* 자료구조를 활용
  + ~~링크드리스트, “벡터”의 사용~~
    - ~~링크드리스트 개념 활용 문제~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=813~~](http://usaco.org/index.php?page=viewproblem2&cpid=813) ~~(2018 Feb G 1번)~~
  + ~~Stack, Queue의 활용~~
    - ~~Infix to Postfix, Stack Calculator~~
    - ~~Stack 활용 (~~ [~~http://usaco.org/index.php?page=viewproblem2&cpid=922~~](http://usaco.org/index.php?page=viewproblem2&cpid=922)~~)~~
      * [~~https://www.acmicpc.net/problem/1874~~](https://www.acmicpc.net/problem/1874) ~~(스택 수열)~~
      * [~~https://www.acmicpc.net/problem/4949~~](https://www.acmicpc.net/problem/4949) ~~(균형잡힌 세상 -> 괄호 쌍 맞추기)~~
  + ~~Tree (\*\* Tree의 심화 개념은 Graph의 연장선상에서 이해)~~ 
    - ~~Binary Search Tree~~
    - ~~C++ Map, Set의 사용~~
      * ~~Set의 lower\_bound 사용~~
        + [~~http://usaco.org/index.php?page=viewproblem2&cpid=714~~](http://usaco.org/index.php?page=viewproblem2&cpid=714) ~~(2017 Feb S1)~~
      * ~~Map을 활용하면 쉽게 풀림~~
        + [~~http://usaco.org/index.php?page=viewproblem2&cpid=862~~](http://usaco.org/index.php?page=viewproblem2&cpid=862) ~~(2018 Dec G 2번)~~
      * ~~Balanced Binary Search Tree를 활용~~
        + [~~http://usaco.org/index.php?page=viewproblem2&cpid=767~~](http://usaco.org/index.php?page=viewproblem2&cpid=767) ~~(2017 Dec G3)~~
    - ~~Tree의 재귀적인 구조와 DFS, BFS~~
    - ~~Union-Find (Disjoint Set) -> Tree를 사용한 집합의 표현~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=789~~](http://usaco.org/index.php?page=viewproblem2&cpid=789) ~~(2018 Jan G 1번) :: 2018 Jan S 3번 http://usaco.org/index.php?page=viewproblem2&cpid=788 (BFS 활용 풀이)의 어려운 버전~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=669~~](http://usaco.org/index.php?page=viewproblem2&cpid=669) ~~(2016 Dec G 1번)~~
  + ~~Heap의 사용~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=859~~](http://usaco.org/index.php?page=viewproblem2&cpid=859) ~~(2018 Dec S 2번) : Priority Queue 사용 ?~~
  + ~~Hash Table ?, Hash Map~~
* 정렬
  + ~~정렬을 하는 방법~~
    - ~~Bubble, Insertion, Merge, Heap, Quick(Partition!), Radix~~
    - ~~Insertion Sort의 개념을 활용~~ 
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=898~~](http://usaco.org/index.php?page=viewproblem2&cpid=898) ~~(2019 Jan G 2번)~~
  + ~~정렬을 활용한 문제풀이~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=896~~](http://usaco.org/index.php?page=viewproblem2&cpid=896) ~~(2019 Jan S 3번) : 정렬을 해서 문제를 쉽게 품~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=786~~](http://usaco.org/index.php?page=viewproblem2&cpid=786) ~~(2018 Jan S 1번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=787~~](http://usaco.org/index.php?page=viewproblem2&cpid=787) ~~(2018 Jan S 2번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=573~~](http://usaco.org/index.php?page=viewproblem2&cpid=573) ~~(2015 Dec G 1번)~~
* 가장 중요한 그래프
  + ~~그래프를 만드는 방법 & 그래프의 정의, 종류~~
  + ~~문제를 그래프로 보기~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=894~~](http://usaco.org/index.php?page=viewproblem2&cpid=894) ~~(2019 Jan S 1번)~~
  + ~~DFS, BFS~~
    - ~~길찾기, 2차원 좌표에서 DFS 사용~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=860~~](http://usaco.org/index.php?page=viewproblem2&cpid=860) ~~(2018 Dec S 3번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=788~~](http://usaco.org/index.php?page=viewproblem2&cpid=788) ~~(BFS, 2018 Jan S 3번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=716~~](http://usaco.org/index.php?page=viewproblem2&cpid=716) ~~(2017 Feb S 3번)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=668~~](http://usaco.org/index.php?page=viewproblem2&cpid=668) ~~(2016 Dec S 3번)~~
    - ~~Flood Fill~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=944~~](http://usaco.org/index.php?page=viewproblem2&cpid=944) ~~(2019 US S 3번)~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=920~~](http://usaco.org/index.php?page=viewproblem2&cpid=920) ~~(2019 Feb S 3번)~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=895~~](http://usaco.org/index.php?page=viewproblem2&cpid=895) ~~(2019 Jan S 2번)~~
  + ~~DFS, BFS 활용~~
    - ~~DFS 활용~~ [~~http://usaco.org/index.php?page=viewproblem2&cpid=814~~](http://usaco.org/index.php?page=viewproblem2&cpid=814) ~~(2018 Feb G 2)~~
    - [~~http://usaco.org/index.php?page=viewproblem2&cpid=790~~](http://usaco.org/index.php?page=viewproblem2&cpid=790) ~~(2018 Jan G 2)~~
    - ~~BFS로 최단거리 : Vertex의 의미를 확장~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=695~~](http://usaco.org/index.php?page=viewproblem2&cpid=695) ~~(2017 G 3번)~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=575~~](http://usaco.org/index.php?page=viewproblem2&cpid=575) ~~(2015 G 3번)~~
  + ~~Minimum Spanning Tree~~
    - ~~Prim~~
  + ~~\*\*Tree~~
    - ~~Binary Indexed Tree~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=719~~](http://usaco.org/index.php?page=viewproblem2&cpid=719) ~~(2017 Feb G 3번)~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=693~~](http://usaco.org/index.php?page=viewproblem2&cpid=693) ~~(2017 Jan G 1번 : 귀찮음)~~
    - ~~LCA (Lowest Common Ancestor)~~
      * ~~2019 February 1~~
  + ~~Shortest Path~~
    - ~~Dijkstra~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=899~~](http://usaco.org/index.php?page=viewproblem2&cpid=899) ~~(2019 Jan G 3번)~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=861~~](http://usaco.org/index.php?page=viewproblem2&cpid=861) ~~(2018 Dec G 1번)~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=717~~](http://usaco.org/index.php?page=viewproblem2&cpid=717) ~~(2017 Feb G 1번)~~
      * [~~http://usaco.org/index.php?page=viewproblem2&cpid=671~~](http://usaco.org/index.php?page=viewproblem2&cpid=671) ~~(2016 Dec G 3번)~~
    - ~~Topological Sorting~~
    - ~~BFS 이용~~
    - ~~벨만-포드~~
    - ~~플로이드 워셜~~
* ~~다른 다양한 알고리즘~~
  + ~~문자열 매칭~~
  + ~~프림 알고리즘~~
  + ~~분할 정복~~
  + ~~백 트래킹~~
  + ~~정수론 (유클리드 호제법, 피보나치, 등등)~~
  + ~~트라이~~
  + ~~네트워크 유량~~