Math Matrix expo	Graph	Digit dp	Geometry convex Hull	Game Theor	y Adhoc Meet in the middle	Data Structure Stack	String Rabin-Karp	Search Binary Search	<- New Topic						
matrix expo	BFS	Digit ap	convex muii	NIM	advanced greedy topics	Stack	Rabin-Rarp	Binary Search							
Chinese remainder theorem	DFS	Bitmask dp	sweep line	Grundy	(example?)	Queue	KMP	Ternary Search							
					Advanced Bit operations I										
					meant the properties of and,or,xor which we can										
					use in many ways, actually,										
					different properties of bit operations which can be										
FFT / NTT	Flow	Knuth optimization			used in contests. (For	Segment Tree	Suffix array, LCP								
Probability - Expected Value	Coloring		radial sweep	e Hackenbush	example?) Backtracking Tricks	Lazy propagation in ST	suffix Automaton								
Probability - Expecied value	Coloning	http://codeforces.	raulai sweep		Backliacking Hicks	Lazy propagation in 31	Sullix Automatori								
		com/blog/entry/4776	ı												
Solving recurrences	Bipartite Matching	Grane Holl Trials			constructive algorithm	Dominator tree	Manacher								
Gaussian Elimination	Centroid Decomposition	(Offline / Dynamic)			interactive problems	Dynamic ST	Palindrome tree								
		different													
Linear Algebra (example?)	Stable Marriage Problem					Treap	Aho Corasick								
Combinatoric theorems, like stars and bars, catalan, hockey stick theorem	HopcroftKarp	DP optimization using interval trees				Sqrt Decomposition	Z algorithm								
, , , , , , , , , , , , , , , , , , , ,		Divide & Conquer													
Lucas Theorem	MST (Directed Graph)	Optimization				MO's Algo	Trie (DP on trie)								
Burnside Lemma	Finding Bridges Online	Fast Zeta and Mobius Transform				Persistent Seg Tree	Suffix Tree: Ukkone	en .							
		Fast Subset													
Primality Test ( Millar Rabin or others)	Euler Path	Convolution (https: //goo.gl/7WZJsp)				Sparse Table	Suffix tree from lcp array								
reas (minus reason or oblicis)							Automata: Formal								
							language, context free lang, formal								
							grammer, context								
Matrix expo (why cycle occurs and how	http://e-maxx						free grammer. Nfa/Dfa, convert nfa								
to cope with it) (What do you mean by	ru/algo/bridge_searching						>dfa. Automaton for	r							
cycle?)		li chao tree				Sliding window / Two pointers	regular expression								
FWHT	Heavy Light Decomposition	Sibling DP				HLD	LL1 parser, shunting yard algorithm.	a							
	Securiposition					Binary Effing/ I CA /http://algorithms-	Simplified needs								
		wqs binary search				live.blogspot.com/2017/04/episode- 17-binary-lifting.html)									
Simplex LP Discrete Logarithm	Blossom Algorithm DSU on tree	aka alien trick				17-binary-lifting.html) Treap									
Generating Functions (Calculating	Soo on nee					поир									
Polynomial Inverse, Sqrt of Polynomial	L														
etc)	Hungarian All pairs shortest path					2-Sat Sqrt-Tree (https://codeforces.									
Mobius Inversion	(Gomory-Hu Tree)					com/blog/entry/57046)									
Prefix sum of multiplicative functions in C (n^(2/3)) using Dirichlet convolution	Find cycle in directed graph using dfs					https://cp-algorithms. com/data_structures/sqrt-tree.html									
Fast Integer Factorization (Polard-Rho															
and others)	Kahn's algorithm (link?)					Parallel Binary Search									
						combination of two or more Data structures, like BIT on tree or									
polya enumeration theorem	Centroid Decomposition					segment tree of BIT									
polynomial interpolation	Block cut tree					Trie									
stirling number, catalan number	Hall's marriage theorem Link cut tree					segment tree on Euler path Cartesian Trees									
	DFS, dfs tree. bridge					Cartesian Trees									
	finding algo, articulation														
	point, scc, tarjan's scc. Konigs criterion, min					Implicit lazy segment tree									
	edge cover, max														
	independent set, min vertex cover, berge's														
	lemma, kuhn algo. cover														
	dag by min path					KD-Tree									
						Static DS to Expandable DS via O (log n)									
						Expandable DS to Dynamic DS via O	1								
						(log n) (Offline) (Example?) Heavy-Light Seperation Trick									
						Merge-Sort Tree									
						AVL tree									
						Splay tree									
						Segment Tree Beats									
						Wavelet Tree									
						Persistent Stack,array									
						Details of "pair" of STL & its application	ons								
						Ji driver segment tree Details of "unordered set,									
						unordered multiset, unordered map,									
						unordered_multimap* of STL & its applications									
						Heap, Heapsort									
						Mergeable heaps: binomial heap, pai	ring heap, randomizer	d medable hean							
						BIT	5								
						Skiplist, Indexable skiplist									
						ST: Top down, bottom up									
						Treap: merge, split									
						Tream: Implicit keys, Segment revers	e								
						Ropes									