Habib41/2_BUBT   A^2 Online Judge   »   by Ahmed Aly

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Number Theory problems

	Problem Name		Online Judge	Year	Contest
1	Fedya and Maths	Categories	Codeforces		Codeforces Round #260 (Div. 2)
2	Panoramix's Prediction	Categories	Codeforces		Codeforces Beta Round #69 (Div. 2 Only)
3	The primary problem	Categories	UVA		
4	Cifera	Categories	Codeforces		Codeforces Beta Round #86 (Div. 2 Only)
5	Marbles	Categories	SPOJ		
6	Tip Top Game	Categories	SPOJ		
7	Factors and Factorials	Categories	UVA		
8	GCD Extreme	Categories	SPOJ		
9	Goldbach's Conjecture (II)	Categories	UVA		
10	Almost Prime Numbers	Categories	UVA		
11	Toy Army	Categories	Codeforces		Codeforces Beta Round #72 (Div. 2 Only)
12	Divisors	Categories	SPOJ		
13	Design Tutorial: Learn from Math	Categories	Codeforces		Codeforces Round #270
14	Integer Factorization (15 digits)	Categories	SPOJ		
15	Ilya and Bank Account	Categories	Codeforces		Codeforces Round #186 (Div. 2)
16	String Task	Categories	Codeforces		Codeforces Beta Round #89 (Div. 2)
17	Prime Words	Categories	UVA		
18	Medium Factorization	Categories	SPOJ		
19	Game of Lines	Categories	SPOJ		
20	Count the factors	Categories	TJU		
21	Totient Extreme	Categories	SPOJ		
22	Arpa's hard exam and Mehrdad's naive cheat	Categories	Codeforces		Codeforces Round #383 (Div. 2)
23	Vasya and Petya's Game	Categories	Codeforces		Codeforces Round #319 (Div. 1) & Codeforces Round #319 (Div. 2)
24	Goldbach's Conjecture	Categories	UVA		
25	Relatives	Categories	UVA		
26	Factovisors	Categories	UVA		
27	Twin Primes	Categories	UVA		
28	Hexadecimal's theorem	Categories	Codeforces		Codeforces Round #125 (Div. 2)
29	Play with Floor and Ceil	Categories	UVA		
30	Bachgold Problem	Categories	Codeforces		Codeforces Round #388 (Div. 2)
31	Prime Generator	Categories	SPOJ		
32	Celebrity jeopardy	Categories	UVA		
33	Almost Prime	Categories	Codeforces		Codeforces Beta Round #26 (Codeforces format)
34	Multiplication Table	Categories	Codeforces		Codeforces Round #319 (Div. 2)
35	LCM Sum	Categories	SPOJ		
36	Prime Cuts	Categories	UVA		
37	Prime Number Theorem	Categories	SPOJ		
38	Ones	Categories	UVA		
39	The Moronic Cowmpouter	Categories	SPOJ		
40	Divisor Summation	Categories	SPOJ		
41	Factorial	Categories	Live Archive	2000	Europe - Central
42	T-primes	Categories	Codeforces		Codeforces Round #142 (Div. 2)
43	Factorial	Categories	SPOJ		
44	Prime or Not	Categories	SPOJ		
45	Again Twenty Five!	Categories	Codeforces		Experimental Educational Round: VolBIT Formulas Blitz
46	The Equation	Categories	SGU		
47	Alyona and Numbers	Categories	Codeforces		Codeforces Round #358 (Div. 2)
48	Lucky Division	Categories	Codeforces		Codeforces Beta Round #91 (Div. 2 Only)
49	Fombinatorial	Categories	CodeChef		
50	Two squares or not two squares	Categories	SPOJ		
51	Simply Emirp	Categories	UVA		
52	Bear and Poker	Categories	Codeforces		Codeforces Round #318 [RussianCodeCup Thanks-Round] (Div. 1) & Codeforces Round #318 [RussianCodeCup Thanks-Round] (Div. 2)
53	Graph Connectivity	Categories	UVA		

	Problem Name	Online Judge	Year	Contest
54	A and B and Team Training	Categories	Codeforces		Codeforces Round #294 (Div. 2)
55	Euler Totient Function	Categories	SPOJ		
56	Ice Sculptures	Categories	Codeforces		VK Cup 2012 Qualification Round 1
57	TEX Quotes	Categories	Live Archive	1994	North America - East Central NA
58	Integer Factorization (20 digits)	Categories	SPOJ		
59	Dima and Lisa	Categories	Codeforces		Codeforces Round #324 (Div. 2)
60	Pride	Categories	Codeforces		Codeforces Round #446 (Div. 1) & Codeforces Round #446 (Div. 2)
61	Vladik and fractions	Categories	Codeforces		Codeforces Round #384 (Div. 2)
62	Mint	Categories	UVA		
63	Prime Again	Categories	SPOJ		
64	Square-free integers	Categories	SPOJ		
65	Prime Matrix	Categories	Codeforces		Codeforces Round #166 (Div. 2)
66	Equation	Categories	SPOJ		
67	Taxes	Categories	Codeforces		Codeforces Round #382 (Div. 2) & Codeforces Round #382 (Div. 1)
68	Divisors 2	Categories	SPOJ		
69	Primitive Root	Categories	SPOJ		
70	MCQ Exam	Categories	A2 Online Judge		
71	Rational Resistance	Categories	Codeforces		Codeforces Round #200 (Div. 1) & Codeforces Round #200 (Div. 2)
72	The Bytelandian Cryptographer (Act I)	Categories	SPOJ		
73	Mashmokh and Numbers	Categories	Codeforces		Codeforces Round #240 (Div. 1) & Codeforces Round #240 (Div. 2)
74	Divisor Summation (Hard)	Categories	SPOJ		
75	Number Theory for Newbies	Categories	UVA		
76	N DIV PHI_N	Categories	SPOJ		
77	Sort fractions	Categories	SPOJ		
78	Leha and Function	Categories	Codeforces		Codeforces Round #429 (Div. 1) & Codeforces Round #429 (Div. 2)
79	Odd Numbers of Divisors	Categories	SPOJ		
80	Alice and Bob	Categories	Codeforces		Codeforces Round #201 (Div. 1) & Codeforces Round #201 (Div. 2)
81	Soldier and Number Game	Categories	Codeforces		Codeforces Round #304 (Div. 2)
82	Arpa's obvious problem and Mehrdad's terrible solution	Categories	Codeforces		Codeforces Round #383 (Div. 2)
83	Goldbach and Euler	Categories	UVA		
84	Psycho	Categories	SPOJ		
85	Drazil and His Happy Friends	Categories	Codeforces		Codeforces Round #292 (Div. 1) & Codeforces Round #292 (Div. 2) & Codeforces Round #292 (Div. 1) Codeforces Round #292 (Div. 2)
86	k-th divisor	Categories	Codeforces		Educational Codeforces Round 17
87	Mr. Azad and his Son!!!!!	Categories	UVA		
88	Playing with Marbles	Categories	SPOJ		
89	Anagrammatic Primes	Categories	UVA		
90	Marbles	Categories	UVA		
91	Minimum Number	Categories	SPOJ		
92	Pythagorean Triples	Categories	Codeforces		Codeforces Round #368 (Div. 2)
93	LCM Challenge	Categories	Codeforces		Codeforces Round #146 (Div. 1) & Codeforces Round #146 (Div. 2)
94	Jumping Champion	Categories	UVA		
95	Chef and Functions	Categories	CodeChef		
96	Binomial Coefficients	Categories	SPOJ		
97	Fox Dividing Cheese	Categories	Codeforces		Codeforces Round #218 (Div. 2)
98	Eugeny and Play List	Categories	Codeforces		Codeforces Round #182 (Div. 2)
99	Skyscraper Floors	Categories	SPOJ		
100	Noldbach problem	Categories	Codeforces		Codeforces Beta Round #17
101	A Trivial Problem	Categories	Codeforces		Manthan, Codefest 16
102	Easy Number Challenge	Categories	Codeforces		Codeforces Round #146 (Div. 2)
103	Little Elephant and Numbers	Categories	Codeforces		Codeforces Round #136 (Div. 2)
104	Mike and gcd problem	Categories	Codeforces		Codeforces Round #410 (Div. 2)
105	Bear and Prime Numbers	Categories	Codeforces		Codeforces Round #226 (Div. 2)
106	Congruence Equation	Categories	SPOJ		
107	Modified GCD	Categories	Codeforces		Codeforces Beta Round #67 (Div. 2)
108	Win or Freeze	Categories	Codeforces		Codeforces Round #107 (Div. 1) & Codeforces Round #107 (Div. 2)
109	The Super Powers	Categories	UVA		
110	Primes on Interval	Categories	Codeforces		Codeforces Round #147 (Div. 2)
111	Cows and Primitive Roots	Categories	Codeforces		Codeforces Round #174 (Div. 2)
112	Routine Problem	Categories	Codeforces		Codeforces Round #196 (Div. 2)
113	Levko and Permutation	Categories	Codeforces		Codeforces Round #210 (Div. 2)
114	Sky Code	Categories	SPOJ		
115	Quiz	Categories	Codeforces		Codeforces Round #196 (Div. 2) & Codeforces Round #196 (Div. 1)
116	Primes or Palindromes?	Categories	Codeforces		Codeforces Round #315 (Div. 1) & Codeforces Round #315 (Div. 2)
117	Permutation Primes	Categories	Live Archive	2004	Asia - Dhaka
118	Homework	Categories	SPOJ		
119	Good Sequences	Categories	Codeforces		Codeforces Round #162 (Div. 1) & Codeforces Round #162 (Div. 2)

	Problem Name	Online Judge	Year	Contest
120	GCD Determinant	Categories	SPOJ	
121	The Meaningless Game	Categories	Codeforces	Codeforces Round #426 (Div. 1) & Codeforces Round #426 (Div. 2)
122	DDF	Categories	UVA	
123	Primal Fear	Categories	SPOJ	
124	Find Maximum	Categories	Codeforces	Codeforces Round #205 (Div. 2)
125	Subtractions	Categories	Codeforces	Codeforces Testing Round #5
126	Subtraction	Categories	A2 Online Judge	
127	Multipliers	Categories	Codeforces	Codeforces Round #338 (Div. 2)
128	Boring Card Game	Categories	Live Archive	2011	Europe - Central
129	Fortune Telling	Categories	Codeforces	Codeforces Beta Round #55 (Div. 2)
130	Petya and Divisors	Categories	Codeforces	Codeforces Beta Round #85 (Div. 1 Only) & Codeforces Beta Round #85 (Div. 2 Only)
131	Ralph And His Magic Field	Categories	Codeforces	Codeforces Round #447 (Div. 2)
132	Gerald and Giant Chess	Categories	Codeforces	Codeforces Round #313 (Div. 1) & Codeforces Round #313 (Div. 2)
133	Divisible by Seven	Categories	Codeforces	Codeforces Round #221 (Div. 1) & Codeforces Round #221 (Div. 2)
134	The Most Complex Number	Categories	Timus	
135	N DIV PHI_N (Hard)	Categories	SPOJ	
136	SETI	Categories	SPOJ	
137	Gaussian Prime Factors	Categories	Live Archive	2006	Asia - Manila
138	Ant colony	Categories	Codeforces	Codeforces Round #271 (Div. 2)
139	Dots	Categories	SPOJ	
140	Fox And Jumping	Categories	Codeforces	Codeforces Round #290 (Div. 2) & Codeforces Round #290 (Div. 1)
141	Ksusha and Array	Categories	Codeforces	Croc Champ 2013 - Round 2 (Div. 2 Edition)
142	Remainders Game	Categories	Codeforces	Codeforces Round #360 (Div. 1) & Codeforces Round #360 (Div. 2)
143	Skyscraper Floors	Categories	UVA	
144	Irrational problem	Categories	Codeforces	Codeforces Beta Round #62
145	Colliders	Categories	Codeforces	Codeforces Round #109 (Div. 1) & Codeforces Round #109 (Div. 2)
146	Broken Keyboard	Categories	UVA	
147	Well-known Numbers	Categories	Codeforces	Codeforces Round #139 (Div. 2)
148	Chilly Willy	Categories	Codeforces	Codeforces Round #152 (Div. 2)
149	Devu and Partitioning of the Array	Categories	Codeforces	Codeforces Round #251 (Div. 2)
150	Rank of a Fraction	Categories	SPOJ	
151	Round Table Knights	Categories	Codeforces	Codeforces Beta Round #65 (Div. 2)
152	Palindrome Degree	Categories	Codeforces	Codeforces Beta Round #7
153	Array and Operations	Categories	Codeforces	Codeforces Round #284 (Div. 1) & Codeforces Round #284 (Div. 2)
154	Prime Permutation	Categories	Codeforces	Codeforces Beta Round #92 (Div. 1 Only) & Codeforces Beta Round #92 (Div. 2 Only)
155	Shaass and Lights	Categories	Codeforces	Codeforces Round #178 (Div. 2)
156	Pseudorandom Sequence Period	Categories	Codeforces	Croc Champ 2012 - Qualification Round
157	Roman and Numbers	Categories	Codeforces	Codeforces Round #235 (Div. 2)
158	Vasya and Beautiful Arrays	Categories	Codeforces	Codeforces Round #206 (Div. 1) & Codeforces Round #206 (Div. 2)
159	Upgrading Array	Categories	Codeforces	Codeforces Round #236 (Div. 2) & Codeforces Round #236 (Div. 1)
160	Petya and His Friends	Categories	Codeforces	Codeforces Beta Round #61 (Div. 2)
161	Vasily the Bear and Sequence	Categories	Codeforces	Codeforces Round #195 (Div. 2)
162	Line	Categories	Codeforces	Codeforces Beta Round #7
163	Clique in the Divisibility Graph	Categories	Codeforces	VK Cup 2015 - Finals, online mirror
164	Anton and School - 2	Categories	Codeforces	Codeforces Round #404 (Div. 2)
165	Tutorial BFS	Categories	SPOJ	
166	Rectangular Game	Categories	Codeforces	ABBYY Cup 2.0 - Easy
167	Winter is here	Categories	Codeforces	Codeforces Round #428 (Div. 2)
168	Number With The Given Amount Of Divisors	Categories	Codeforces	Codeforces Beta Round #27 (Codeforces format, Div. 2)
169	Mike and Foam	Categories	Codeforces	Codeforces Round #305 (Div. 1) & Codeforces Round #305 (Div. 2)
170	Rectangular Game	Categories	Codeforces	ABBYY Cup 2.0 - Easy
171	Chocolate	Categories	Codeforces	Codeforces Round #279 (Div. 2)
172	Monitor	Categories	Codeforces	Codeforces Beta Round #16 (Div. 2 Only)
173	Moodular Arithmetic	Categories	Codeforces	Codeforces Round #334 (Div. 1) & Codeforces Round #334 (Div. 2)
174	Polygon Encoder	Categories	SPOJ	
175	Longest Subsequence	Categories	Codeforces	Educational Codeforces Round 9
176	Unusual Sequences	Categories	Codeforces	Codeforces Round #450 (Div. 2)
177	GukiZ and Binary Operations	Categories	Codeforces	Codeforces Round #307 (Div. 2)
178	DZY Loves Fibonacci Numbers	Categories	Codeforces	Codeforces Round #255 (Div. 1) & Codeforces Round #255 (Div. 2)
179	Bots	Categories	Codeforces	Bubble Cup 8 - Finals [Online Mirror]
180	Pluses everywhere	Categories	Codeforces	Codeforces Round #295 (Div. 2) & Codeforces Round #295 (Div. 1)
181	Divisors	Categories	Codeforces	Codeforces Round #256 (Div. 2)
182	Goldbach++	Categories	Live Archive	2005	North America - Southeast USA
183	Lucky Permutation	Categories	Codeforces	Codeforces Beta Round #91 (Div. 1 Only) & Codeforces Beta Round #91 (Div. 2 Only)
184	Calendar Reform	Categories	Codeforces	Croc Champ 2012 - Qualification Round
185	Jzzhu and Apples	Categories	Codeforces	Codeforces Round #257 (Div. 1) & Codeforces Round #257 (Div. 2)
186	ZS and The Birthday Paradox	Categories	Codeforces	Codeforces Round #369 (Div. 2)

#	Problem Name		Online Judge	Year	Contest
187	Array GCD	Categories	Codeforces		AIM Tech Round (Div. 1) & AIM Tech Round (Div. 2)
188	Reducing Fractions	Categories	Codeforces		Codeforces Round #137 (Div. 2)
189	Prefix Product Sequence	Categories	Codeforces		Codeforces Round #278 (Div. 1) & Codeforces Round #278 (Div. 2)
190	Very Interesting Game	Categories	Codeforces		Codeforces Beta Round #88
191	Printing some primes (Hard)	Categories	SPOJ		
192	Devu and Flowers	Categories	Codeforces		Codeforces Round #258 (Div. 2)
193	Beaver Game	Categories	Codeforces		Codeforces Beta Round #70 (Div. 2)
194	Apple Tree	Categories	Codeforces		Codeforces Round #202 (Div. 1) & Codeforces Round #202 (Div. 2)
195	Beautiful numbers	Categories	Codeforces		Codeforces Beta Round #51
196	On Sum of Fractions	Categories	Codeforces		Codeforces Round #232 (Div. 1) & Codeforces Round #232 (Div. 2)
197	Number Transformation	Categories	Codeforces		Codeforces Round #153 (Div. 1) & Codeforces Round #153 (Div. 2)
198	Alice, Bob, Oranges and Apples	Categories	Codeforces		Codeforces Round #325 (Div. 1) & Codeforces Round #325 (Div. 2)
199	Traffic Jams in the Land	Categories	Codeforces		Codeforces Round #284 (Div. 1)
200	Chessboard Billiard	Categories	Codeforces		Codeforces Beta Round #68
201	Pairs of Numbers	Categories	Codeforces		Codeforces Testing Round #3
202	Sum of Remainders	Categories	Codeforces		Educational Codeforces Round 5
203	Double Happiness	Categories	Codeforces		Codeforces Beta Round #86 (Div. 1 Only) & Codeforces Beta Round #86 (Div. 2 Only)
204	Finding the Kth Prime (Hard)	Categories	SPOJ		
205	ucyhf	Categories	Codeforces		April Fools Day Contest
206	Bamboo Partition	Categories	Codeforces		Codeforces Round #424 (Div. 1, rated, based on VK Cup Finals) & Codeforces Round #424 (Div. 2, rated, based on VK Cup Finals)
207	Digital Root	Categories	Codeforces		Codeforces Beta Round #10
208	On Number of Decompositions into Multipliers	Categories	Codeforces		Codeforces Round #232 (Div. 1) & Codeforces Round #232 (Div. 2)
209	Divisor Tree	Categories	Codeforces		Codeforces Round #196 (Div. 2) & Codeforces Round #196 (Div. 1)
210	Integer Factorization (29 digits)	Categories	SPOJ		
211	Prime Problem	Categories	Codeforces		School Team Contest #3 (Winter Computer School 2010/11)
212	Numbers	Categories	Codeforces		Codeforces Beta Round #72 (Div. 1 Only)
213	Unsolvable	Categories	Codeforces		Codeforces Round #139 (Div. 2)
214	Ultimate Weirdness of an Array	Categories	Codeforces		Codeforces Round #352 (Div. 1) & Codeforces Round #352 (Div. 2)
215	GCD Table	Categories	Codeforces		Codeforces Round #196 (Div. 1)
216	Fractions	Categories	UVA		
217	Number Challenge	Categories	Codeforces		Codeforces Round #146 (Div. 1)
218	Martian Luck	Categories	Codeforces		Codeforces Round #133 (Div. 2)
219	Mishka and Divisors	Categories	Codeforces		Codeforces Round #365 (Div. 2)
220	Notepad	Categories	Codeforces		Codeforces Beta Round #17
221	Timofey and remoduling	Categories	Codeforces		Codeforces Round #395 (Div. 1) & Codeforces Round #395 (Div. 2)
222	Cowslip Collections	Categories	Codeforces		CROC 2016 - Elimination Round
223	Three Horses	Categories	Codeforces		Codeforces Round #166 (Div. 2)
224	Anniversary	Categories	Codeforces		Codeforces Round #140 (Div. 1) & Codeforces Round #140 (Div. 2)
225	The Child and Binary Tree	Categories	Codeforces		Codeforces Round #250 (Div. 1)
226	REQ	Categories	Codeforces		Codeforces Round #330 (Div. 1)
227	Cows and Cool Sequences	Categories	Codeforces		Codeforces Round #174 (Div. 1)
228	Superior Periodic Subarrays	Categories	Codeforces		Codeforces Round #323 (Div. 1) & Codeforces Round #323 (Div. 2)
229	Beautiful Set	Categories	Codeforces		Codeforces Round #213 (Div. 1) & Codeforces Round #213 (Div. 2)
230	Ada and Connections	Categories	SPOJ		
231	Cube Problem	Categories	Codeforces		Croc Champ 2013 - Round 2
232	Periodical Numbers	Categories	Codeforces		Codeforces Round #132 (Div. 2)
233	White, Black and White Again	Categories	Codeforces		Testing Round #6
234	Divisibility Rules	Categories	Codeforces		Codeforces Round #116 (Div. 2, ACM-ICPC Rules)
235	Morrowindows	Categories	Codeforces		Codeforces Beta Round #66
236	Visit of the Great	Categories	Codeforces		Codeforces Round #118 (Div. 1)
237	Shaass and Painter Robot	Categories	Codeforces		Codeforces Round #178 (Div. 2)
238	Superhero's Job	Categories	Codeforces		VK Cup 2015 - Round 3 (unofficial online mirror, Div. 1 only)
239	Levko and Sets	Categories	Codeforces		Codeforces Round #210 (Div. 1)
240	Present for Vitalik the Philatelist	Categories	Codeforces		Codeforces Round #325 (Div. 1)
241	Four Divisors	Categories	Codeforces		Educational Codeforces Round 12
242	Tractor College	Categories	Codeforces		Codeforces Round #126 (Div. 2)
243	Rotatable Number	Categories	Codeforces		Codeforces Round #183 (Div. 1)
244	Swap (Easy - Level 2)	Categories	SPOJ		
245	Mister B and Astronomers	Categories	Codeforces		Codeforces Round #421 (Div. 1)
246	Mister B and Beacons on Field	Categories	Codeforces		Codeforces Round #421 (Div. 1) & Codeforces Round #421 (Div. 2)
247	Prime factorization	Categories	Codeforces		VK Cup 2012 Wild-card Round 1
248	New Year Running	Categories	Codeforces		Good Bye 2014
249	Jzzhu and Squares	Categories	Codeforces		Codeforces Round #257 (Div. 1)
250	Nephren Runs a Cinema	Categories	Codeforces		Codeforces Round #449 (Div. 1)
251	Number of Binominal Coefficients	Categories	Codeforces		Codeforces Round #323 (Div. 1)