

Supplementary Information (SI) for Catalysis Science & Technology.
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Optimization of Nickel-Based Catalysts for Hydrogenolysis of Light Paraffins Using Machine Learning

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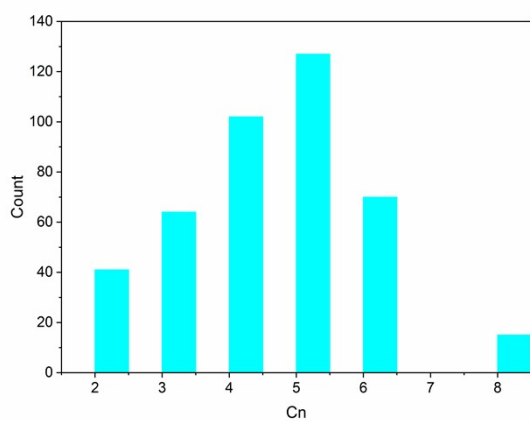
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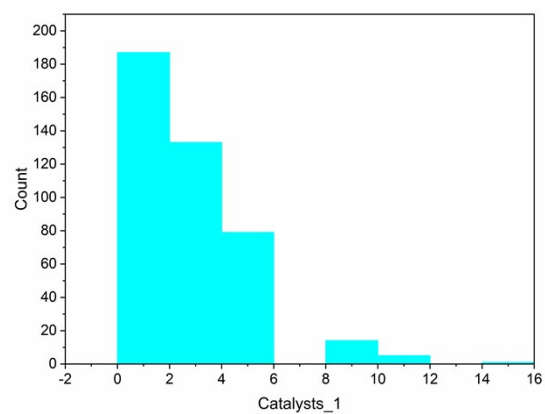
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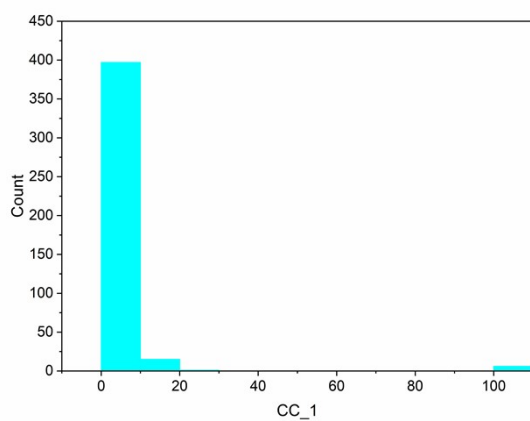
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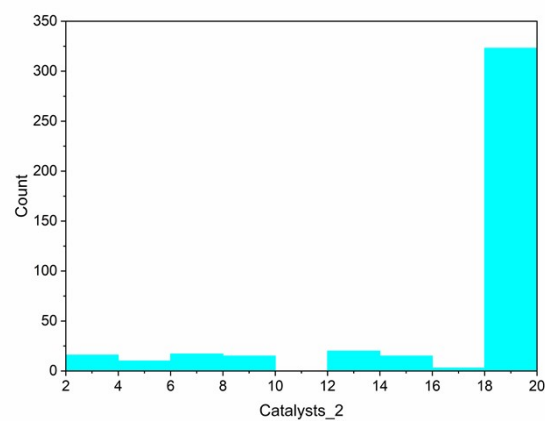
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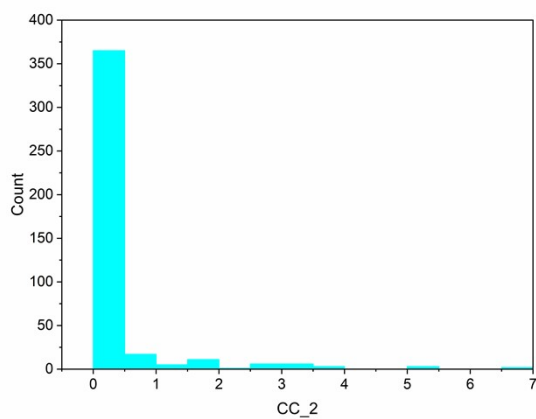
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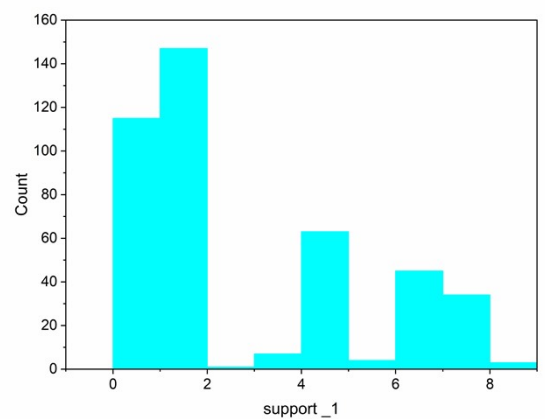
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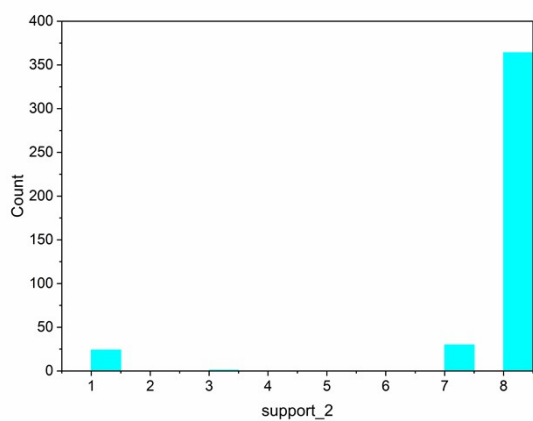
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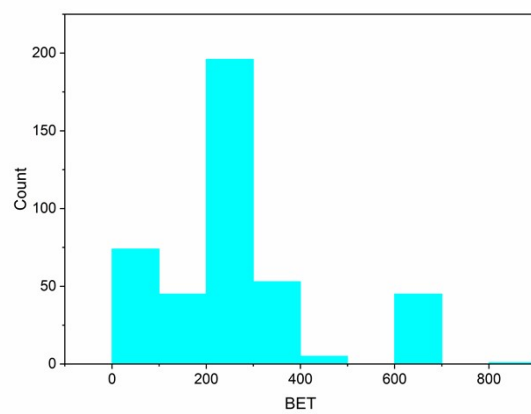
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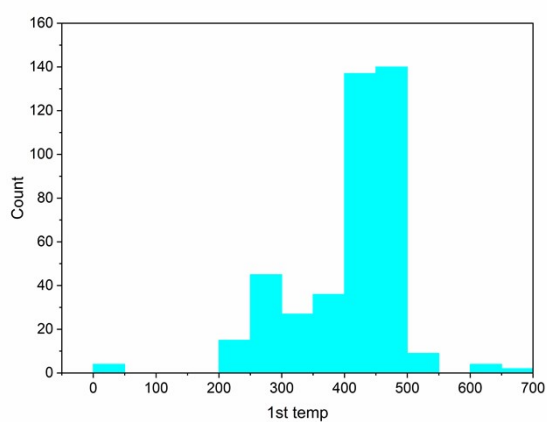
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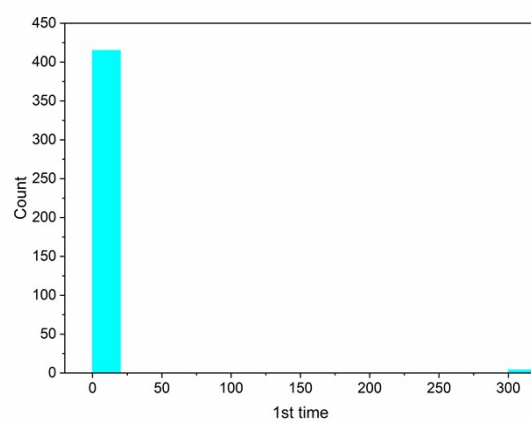
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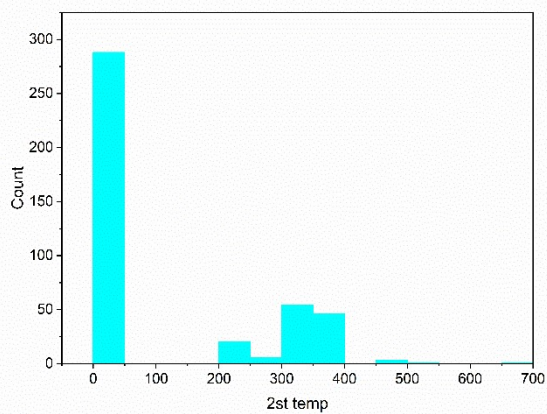
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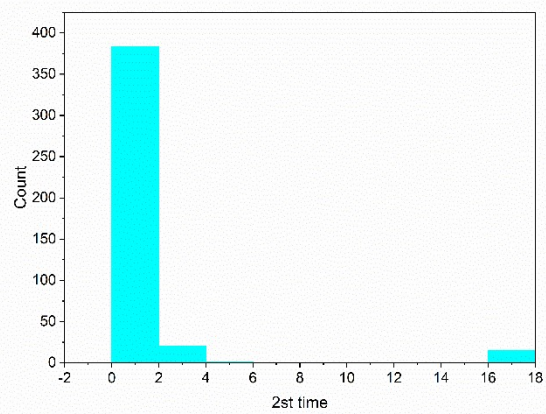
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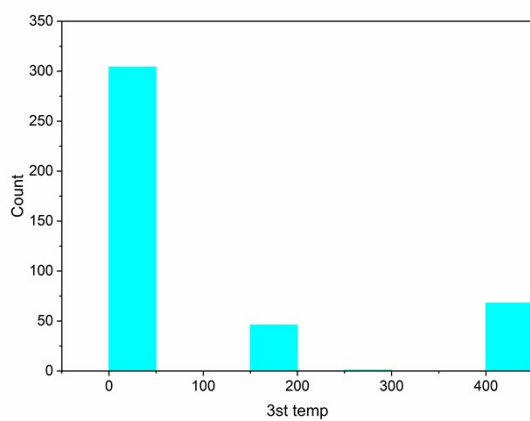
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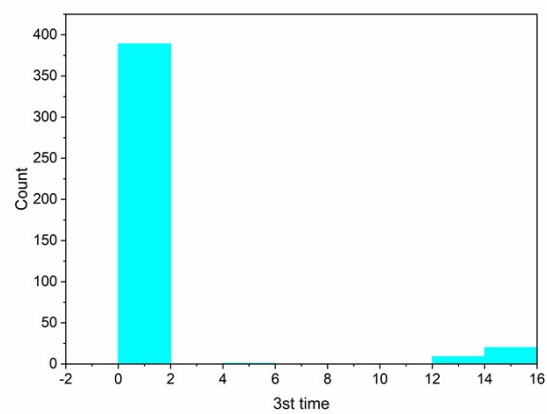
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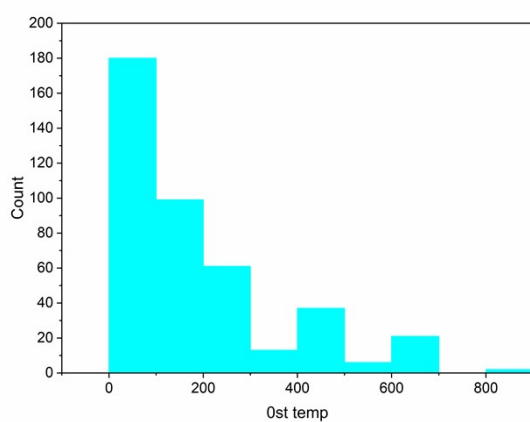
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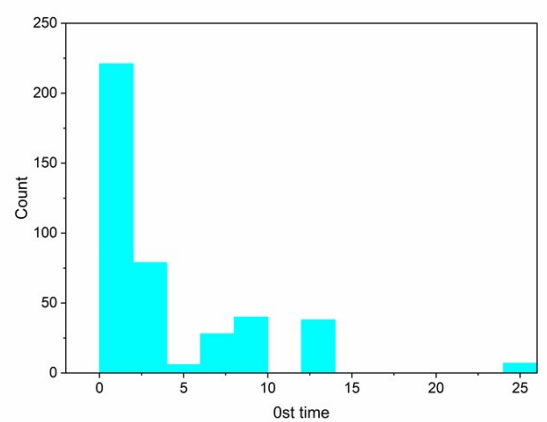
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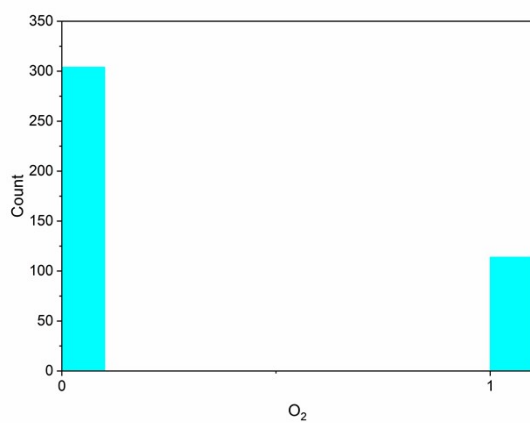
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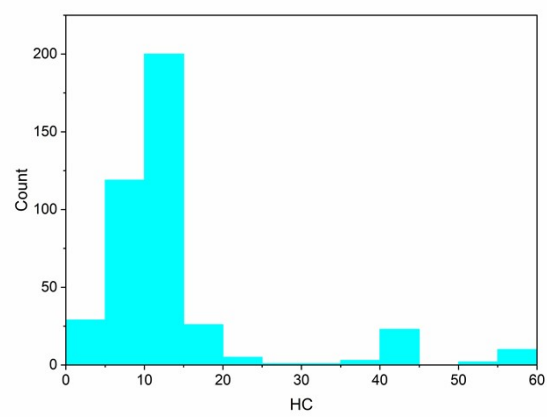
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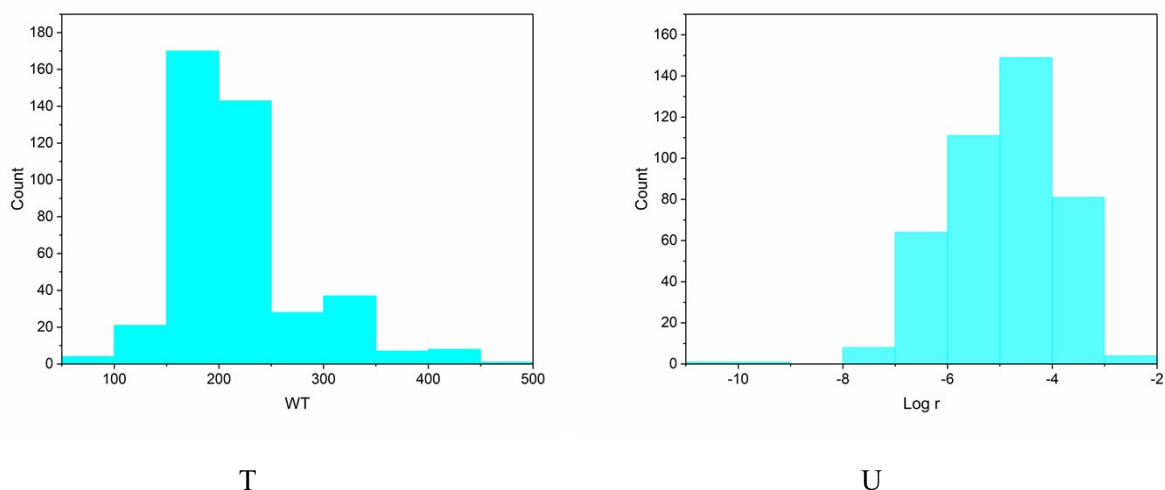


Figure s1. The statistic plots for all features and property of experiments under consideration.

Table s1. Data for Machine learning

No	reference	Cn	Catalysts_1	CC_1	Catalysts_2	CC_2	support_1	support_2	BET
1	1	3	0	3,1	17	0	0	1	228
2	1	2	0	1,16	17	0	1	8	160
3	1	3	0	4,44	17	0	3	8	15
4	1	3	0	3	17	0	0	8	680
5	1	3	0	100	17	0	8	8	228
6	1	3	0	2,9	17	0	1	8	160
7	1	3	0	4,13	17	0	2	3	94
8	1	2	0	2,9	17	0	1	8	160
9	1	3	0	3,86	17	0	0	8	680
10	1	2	0	4,44	17	0	3	8	15
11	2	2	1	3	17	0	0	8	200
12	2	2	1	3	17	0	0	8	200
13	3	6	2	100	17	0	8	8	228
14	4	2	4	0,3	5	0,3	1	8	228
15	4	4	3	0,6	17	0	1	8	228
16	4	3	3	0,3	17	0	1	8	228
17	4	4	3	0,6	17	0	1	8	228
18	4	4	3	0,45	4	0,45	1	8	228
19	4	4	3	0,3	17	0	1	8	228
20	4	3	3	0,6	17	0	1	8	228
21	4	3	3	0,45	4	0,45	1	8	228
22	4	3	3	0,3	4	0,3	1	8	228
23	4	3	3	0,45	4	0,45	1	8	228
24	5	4	3	0,6	17	0	1	8	205

25	5	4	3	0,3	17	0	1	8	205
26	5	4	3	0,3	17	0	1	8	205
27	5	4	3	0,3	4	0,3	1	8	205
28	5	4	3	0,3	4	0,3	1	8	205
29	5	3	3	0,3	17	0	1	8	205
30	5	3	3	0,6	17	0	1	8	205
31	5	4	3	0,6	17	0	1	8	205
32	5	3	3	0,3	4	0,3	1	8	205
33	6	4	4	2,75	17	0	1	8	180
34	6	4	4	2,2	17	0	1	8	180
35	6	4	4	1,5	17	0	1	8	180
36	6	4	4	2,75	17	0	1	8	180
37	6	4	4	2,2	17	0	1	8	180
38	6	4	4	1,5	17	0	4	8	180
39	6	3	4	1,5	17	0	1	8	180
40	6	4	4	1,5	17	0	1	8	180
41	6	4	4	1,5	17	0	1	8	180
42	6	4	4	2,75	17	0	1	8	180
43	6	4	4	1,5	17	0	1	8	180
44	7	2	1	0,95	17	0	1	8	102
45	7	3	1	0,54	17	0	5	8	2
46	7	2	1	0,97	17	0	0	8	203
47	7	4	1	0,95	17	0	1	8	102
48	8	2	5	5	17	0	0	8	200
49	8	2	1	5	17	0	0	8	200
50	9	4	3	0,48	17	0	5	8	2
51	9	4	3	0,75	17	0	0	8	203
52	9	3	3	0,48	17	0	5	8	2
53	9	4	3	0,89	17	0	1	8	102
54	9	3	3	0,75	17	0	0	8	203
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56	9	4	3	0,75	17	0	0	8	203
57	9	3	3	0,89	17	0	1	8	102
58	9	2	3	0,48	17	0	5	8	2
59	9	2	3	0,75	17	0	0	8	203
60	10	4	3	0,44	17	0	4	8	55
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62	11	3	1	5	17	0	0	1	240
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75	11	2	1	5	17	0	0	1	240
76	11	2	1	5	17	0	0	1	240
77	11	4	1	5	17	0	0	1	240
78	11	3	1	5	17	0	0	1	240
79	11	3	1	5	17	0	0	1	240
80	11	3	1	5	17	0	0	1	240
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82	12	3	2	1	17	0	0	8	200
83	12	4	2	1	17	0	4	8	55
84	12	4	2	1	17	0	0	8	200
85	12	4	2	1	17	0	0	8	200
86	12	3	2	1	17	0	1	8	100
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88	12	3	2	1	17	0	4	8	55
89	12	3	2	1	17	0	1	8	100
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91	14	4	0	4	17	0	1	8	220
92	14	4	0	1	17	0	1	8	220
93	14	4	0	1	17	0	1	8	220
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97	15	4	0	0,92	17	0	1	8	220
98	15	4	0	4	17	0	1	8	220
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100	15	4	0	1	17	0	1	8	200
101	15	4	0	0,78	17	0	1	8	220
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107	15	4	0	4	17	0	1	8	200
108	15	3	0	2,5	17	0	1	8	200
109	15	4	0	1	17	0	1	8	200
110	15	4	0	100	17	0	1	8	220
111	15	4	0	1	17	0	1	8	200
112	16	4	0	0,9	7	0,27	1	8	220
113	16	3	0	0,97	6	0,7	1	8	220
114	16	3	0	0,97	7	0,26	1	8	220
115	16	4	0	0,97	17	0	1	8	220
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117	16	4	0	1,43	7	0,26	1	8	220
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126	17	6	0	5	17	0	4	8	55
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128	17	6	0	0,5	17	0	4	8	55
129	17	6	0	5	17	0	4	8	55
130	17	6	0	0,5	17	0	4	8	55
131	17	6	0	1	17	0	4	8	55
132	17	6	0	5	17	0	4	8	55
133	17	6	0	0,5	17	0	4	8	55
134	17	6	0	0,5	17	0	4	8	55
135	18	4	0	5	17	0	4	8	55
136	18	4	0	1	17	0	4	8	55
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139	18	4	0	5	17	0	4	8	46
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141	18	4	0	5	17	0	4	8	52
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147	19	4	0	1	8	3,5	1	8	100
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163	20	3	9	1	17	0	4	8	55
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165	20	3	10	1	17	0	4	8	55
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187	25	3	0	1,25	13	0,75	3	8	15
188	25	3	0	0,7	13	0,87	3	8	15
189	25	3	0	1,03	13	0,77	3	8	15
190	25	3	0	2,09	17	0	3	8	15
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216	30	2	1	10	17	0	0	1	450

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222	31	5	2	1,02	17	0	0	8	600
223	31	5	2	0,1	3	1,71	0	8	600
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226	31	5	2	0,1	3	1,71	0	8	600
227	31	5	2	1,02	17	0	0	8	600
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230	31	5	2	0,1	3	1,71	0	8	600
231	31	4	3	1,9	17	0	0	8	600
232	31	5	2	0,6	3	0,76	0	8	600
233	31	5	3	1,9	17	0	0	8	600
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236	31	5	3	1,9	17	0	0	8	600
237	31	5	3	1,9	17	0	0	8	600
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239	31	5	2	0,1	3	1,71	0	8	600
240	31	5	2	0,1	3	1,71	0	8	600
241	31	5	2	1,02	17	0	0	8	600
242	31	5	2	0,1	3	1,71	0	8	600
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248	31	5	2	0,6	3	0,76	0	8	600
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258	31	4	2	1,02	17	0	0	8	600
259	32	2	15	20	17	0	0	8	184
260	33	5	2	0,27	13	0,03	0	8	200
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263	33	5	2	0,15	13	0,15	0	8	200
264	33	5	2	0,15	13	0,15	0	8	200

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272	33	5	2	0,15	13	0,15	0	8	200
273	33	5	2	0,3	17	0	0	8	200
274	33	5	2	0,15	13	0,15	0	8	200
275	33	5	2	0,3	17	0	0	8	200
276	33	5	2	0,3	17	0	0	8	200
277	33	6	2	0,27	13	0,2	0	8	200
278	33	5	2	0,15	13	0,15	0	8	200
279	33	5	2	0,3	17	0	0	8	200
280	34	6	0	0,93	17	0	1	8	200
281	34	6	0	1	17	0	1	8	200
282	34	6	0	100	17	0	1	8	200
283	34	8	0	0,31	17	0	1	8	200
284	34	6	0	1	17	0	1	8	200
285	34	8	0	0,86	17	0	1	8	200
286	34	6	0	0,6	17	0	1	8	200
287	34	6	0	1	17	0	1	8	200
288	34	6	0	100	17	0	1	8	228
289	34	6	0	1	17	0	1	8	200
290	34	6	0	100	17	0	8	8	200
291	34	6	0	0,86	17	0	1	8	200
292	34	8	0	0,18	17	0	1	8	200
293	34	6	0	0,31	17	0	1	8	200
294	34	8	0	0,93	17	0	1	8	200
295	34	6	0	0,86	17	0	1	8	200
296	34	6	0	0,18	17	0	1	8	200
297	34	6	0	1	17	0	1	8	200
298	34	6	0	0,18	17	0	1	8	200
299	34	6	0	0,6	17	0	1	8	200
300	34	6	0	0,31	17	0	1	8	200
301	34	6	0	0,18	17	0	1	8	200
302	34	6	0	0,93	17	0	1	8	200
303	34	6	0	0,31	17	0	1	8	200
304	35	8	0	0,9	17	0	1	8	200
305	35	6	0	1	17	0	1	8	200
306	35	8	0	0,4	17	0	4	8	130
307	35	6	0	0,4	17	0	4	8	130
308	35	6	0	0,3	17	0	1	8	200
309	35	6	0	0,4	17	0	4	8	130
310	35	8	0	0,4	17	0	4	8	130
311	35	6	0	0,9	17	0	1	8	200
312	35	8	0	1	17	0	1	8	200

313	35	6	0	0,3	17	0	1	8	200
314	35	8	0	0,4	17	0	4	8	130
315	35	6	0	1	17	0	1	8	200
316	35	8	0	1	17	0	1	8	200
317	35	6	0	0,4	17	0	4	8	130
318	35	6	0	0,9	17	0	1	8	200
319	36	5	5	3	17	0	6	7	333
320	36	5	5	3	17	0	6	7	333
321	36	5	5	3	17	0	6	7	333
322	36	5	5	3	17	0	6	7	333
323	36	5	5	3	17	0	6	8	333
324	36	5	5	3	17	0	6	7	333
325	36	5	5	3	17	0	6	7	333
326	36	5	5	3	17	0	6	8	333
327	36	5	5	3	17	0	6	8	333
328	36	5	5	3	17	0	6	8	333
329	36	5	5	3	17	0	6	7	333
330	36	5	5	3	17	0	6	8	333
331	36	5	5	3	17	0	6	8	333
332	36	5	5	3	17	0	6	8	333
333	36	5	5	3	17	0	6	7	333
334	36	5	5	3	17	0	6	8	333
335	36	5	5	3	17	0	6	7	333
336	36	5	5	3	17	0	6	7	333
337	36	5	5	3	17	0	6	7	333
338	36	5	5	3	17	0	6	7	333
339	36	5	5	3	17	0	6	8	333
340	36	5	5	3	17	0	6	7	333
341	36	5	5	3	17	0	6	7	333
342	36	5	5	3	17	0	6	7	333
343	36	5	5	3	17	0	6	7	333
344	36	5	5	3	17	0	6	7	333
345	36	5	5	3	17	0	6	7	333
346	36	5	5	3	17	0	6	8	333
347	36	5	5	3	17	0	6	7	333
348	36	5	5	3	17	0	6	7	333
349	36	5	5	3	17	0	6	8	333
350	36	5	5	3	17	0	6	7	333
351	36	5	5	3	17	0	6	7	333
352	36	5	5	3	17	0	6	7	333
353	36	5	5	3	17	0	6	7	333
354	36	5	5	3	17	0	6	7	333
355	36	5	5	3	17	0	6	8	333
356	36	5	5	3	17	0	6	7	333
357	36	5	5	3	17	0	6	7	333
358	36	5	5	3	17	0	6	8	333
359	36	5	5	3	17	0	6	7	333
360	36	5	5	3	17	0	6	8	333

361	36	5	5	3	17	0	6	8	333
362	36	5	5	3	17	0	6	7	333
363	36	5	5	3	17	0	6	7	333
364	37	8	0	0,93	17	0,18	1	8	200
365	37	6	0	0,93	7	0,78	1	8	200
366	37	6	0	0,93	7	0,24	1	8	200
367	37	8	0	0,93	17	0	1	8	200
368	37	6	0	0,93	7	0,58	1	8	200
369	37	6	0	0,93	6	0,17	1	8	200
370	37	6	0	0,93	7	0,58	1	8	200
371	37	6	0	0,93	17	0	1	8	200
372	37	8	0	1	5	0,23	1	8	200
373	37	6	0	1	18	0,13	1	8	200
374	37	6	0	0,93	7	0,24	1	8	200
375	37	6	0	0,93	7	0,78	1	8	200
376	37	6	0	0,93	6	0,17	1	8	200
377	37	6	0	1	5	0,23	1	8	200
378	37	6	0	1	17	0	1	8	200
379	37	6	0	1	17	0	1	8	200
380	37	6	0	7,97	17	1,51	1	8	200
381	38	5	5	5,38	15	2,98	7	8	228
382	38	5	5	1,83	15	3,04	7	8	228
383	38	5	5	5	17	0	7	8	228
384	38	5	5	1,83	15	3,04	7	8	228
385	38	5	5	5	17	0	7	8	228
386	38	5	5	1,83	15	3,04	7	8	228
387	38	5	5	5,38	15	2,98	7	8	228
388	38	5	5	5	17	0	7	8	228
389	38	5	5	1,83	15	3,04	7	8	228
390	38	5	5	5	17	0	7	8	228
391	38	5	5	5	17	0	7	8	228
392	38	5	5	5,38	15	2,98	7	8	228
393	38	5	5	5	17	0	7	8	228
394	38	5	5	5,38	15	2,98	7	8	228
395	38	5	5	5,38	15	2,98	7	8	228
396	38	5	5	1,83	15	3,04	7	8	228
397	38	5	5	1,83	15	3,04	7	8	228
398	38	5	5	5	17	0	7	8	228
399	38	5	5	5,38	15	2,98	7	8	228
400	38	5	5	5	17	0	7	8	228
401	39	5	3	2	17	0	4	8	50
402	39	5	3	2	17	0	4	8	50
403	39	8	3	2	17	0	4	8	50
404	39	5	3	2	17	0	4	8	50
405	39	6	3	2	17	0	4	8	50
406	39	6	3	2	17	0	4	8	50
407	39	5	3	2	17	0	4	8	50
408	39	6	3	2	17	0	4	8	50

409	39	5	3	2	17	0	4	8	50
410	39	6	3	2	17	0	4	8	50
411	39	6	3	2	17	0	4	8	50
412	39	5	3	2	17	0	4	8	50
413	39	8	3	2	17	0	4	8	50
414	39	6	3	2	17	0	4	8	50
415	39	5	3	2	17	0	4	8	50
416	40	6	9	0,97	17	0	0	8	200
417	40	2	9	0,97	17	0	0	8	200
418	40	6	9	0,97	17	0	0	8	200
419	40	6	9	0,97	17	0	0	8	200

No	1 st temp	1 st time	2 st temp	2 st time	3 st temp	3 st time	0 st temp
1	400	2	0	0	0	0	110
2	400	2	0	0	0	0	110
3	400	2	0	0	0	0	110
4	400	2	0	0	0	0	110
5	400	2	0	0	0	0	110
6	400	2	0	0	0	0	110
7	400	2	0	0	0	0	110
8	400	2	0	0	0	0	110
9	400	2	0	0	0	0	110
10	400	2	0	0	0	0	110
11	370	12	0	0	0	0	105
12	370	12	0	0	0	0	650
13	0	0	0	0	0	0	0
14	400	2	0	0	0	0	400
15	490	2	0	0	0	0	490
16	490	2	0	0	0	0	490
17	490	2	0	0	0	0	490
18	490	2	0	0	0	0	490
19	490	2	0	0	0	0	490
20	490	2	0	0	0	0	490
21	490	2	0	0	0	0	490
22	400	2	0	0	0	0	400
23	490	2	0	0	0	0	490
24	490	2	0	0	0	0	490
25	490	2	0	0	0	0	490
26	490	2	0	0	0	0	490
27	490	2	0	0	0	0	490
28	490	2	0	0	0	0	490
29	490	2	0	0	0	0	490
30	490	2	0	0	0	0	490
31	490	2	0	0	0	0	490
32	490	2	0	0	0	0	490
33	450	2	0	0	0	0	490

34	450	2	0	0	0	0	490
35	450	2	0	0	0	0	490
36	450	2	0	0	0	0	490
37	450	2	0	0	0	0	490
38	450	2	0	0	0	0	490
39	450	2	0	0	0	0	490
40	450	2	0	0	0	0	490
41	450	2	0	0	0	0	490
42	450	2	0	0	0	0	490
43	450	2	0	0	0	0	490
44	420	3	0	0	0	0	250
45	420	3	0	0	0	0	250
46	420	3	0	0	0	0	250
47	420	3	0	0	0	0	250
48	650	4	650	4	250	4	800
49	650	4	0	0	0	0	800
50	420	3	0	0	0	0	0
51	420	3	0	0	0	0	0
52	420	3	0	0	0	0	0
53	420	3	0	0	0	0	0
54	420	3	0	0	0	0	0
55	420	3	0	0	0	0	0
56	420	3	0	0	0	0	0
57	420	3	0	0	0	0	0
58	420	3	0	0	0	0	0
59	420	3	0	0	0	0	0
60	350	1	0	0	0	0	500
61	450	10	0	0	0	0	600
62	450	10	0	0	0	0	600
63	450	10	0	0	0	0	600
64	450	10	0	0	0	0	600
65	450	10	0	0	0	0	600
66	450	10	0	0	0	0	600
67	450	10	0	0	0	0	600
68	450	10	0	0	0	0	600
69	450	10	0	0	0	0	600
70	450	10	0	0	0	0	600
71	450	10	0	0	0	0	600
72	450	10	0	0	0	0	600
73	450	10	0	0	0	0	600
74	450	10	0	0	0	0	600
75	450	10	0	0	0	0	600
76	450	10	0	0	0	0	600
77	450	10	0	0	0	0	600
78	450	10	0	0	0	0	600
79	450	10	0	0	0	0	600
80	450	10	0	0	0	0	600
81	450	16	350	1	160	1	0

82	450	16	0	0	0	0	0
83	450	16	350	1	160	1	0
84	450	16	350	1	160	1	0
85	450	16	0	0	0	0	0
86	450	16	0	0	0	0	0
87	450	16	350	1	160	1	0
88	450	16	0	0	0	0	0
89	450	16	350	1	160	1	0
90	490	1	0	0	0	0	490
91	480	16	0	0	0	0	250
92	480	16	0	0	0	0	250
93	480	16	350	1	160	1	250
94	480	13	0	0	0	0	0
95	480	13	350	1	160	1	0
96	480	13	350	1	160	1	0
97	480	13	0	0	0	0	0
98	480	13	0	0	0	0	0
99	480	13	350	1	160	1	0
100	480	13	350	1	160	1	0
101	480	13	0	0	0	0	0
102	480	13	0	0	0	0	0
103	480	13	350	1	160	1	0
104	480	13	350	1	160	1	0
105	480	13	350	1	160	1	0
106	480	13	0	0	0	0	0
107	480	13	350	1	160	1	0
108	480	13	0	0	0	0	0
109	480	13	0	0	0	0	0
110	480	13	0	0	0	0	0
111	480	13	0	0	0	0	0
112	480	13	350	1	160	12	0
113	480	13	0	0	0	0	0
114	480	13	0	0	0	0	0
115	480	13	350	1	160	12	0
116	480	13	0	0	0	0	0
117	480	13	350	1	160	12	0
118	480	13	350	1	160	12	0
119	480	13	0	0	0	0	0
120	480	13	0	0	0	0	0
121	480	13	350	1	160	12	0
122	480	13	0	0	0	0	0
123	480	13	350	1	160	12	0
124	480	13	0	0	0	0	0
125	485	16	350	1	160	1	0
126	485	16	0	0	0	0	0
127	620	16	0	0	0	0	0
128	485	16	0	0	0	0	0
129	485	16	350	1	160	1	0

130	620	16	350	1	160	1	0
131	485	16	0	0	0	0	0
132	485	16	350	1	160	1	0
133	620	16	0	0	0	0	0
134	485	16	350	1	160	1	0
135	485	16	350	1	160	1	0
136	485	16	0	0	0	0	0
137	485	16	0	0	0	0	0
138	485	16	0	0	0	0	0
139	485	16	0	0	0	0	0
140	485	16	0	0	0	0	0
141	485	16	350	1	160	1	0
142	620	16	0	0	0	0	0
143	485	16	350	1	160	1	0
144	485	16	0	0	0	0	0
145	485	16	350	1	160	1	0
146	485	16	0	0	0	0	0
147	485	16	350	1	160	1	0
148	485	16	350	1	160	1	0
149	485	16	350	1	160	1	0
150	485	16	0	0	0	0	0
151	485	16	0	0	0	0	0
152	485	16	0	0	0	0	0
153	485	16	0	0	0	0	0
154	485	16	350	1	160	1	0
155	485	16	350	1	160	1	0
156	485	16	350	1	160	1	0
157	485	16	350	1	160	1	0
158	485	16	0	0	0	0	0
159	485	16	350	1	160	1	0
160	485	16	350	1	160	1	0
161	485	16	350	1	160	1	0
162	485	16	350	1	160	1	0
163	485	16	0	0	0	0	400
164	485	16	0	0	0	0	0
165	485	16	350	1	160	1	0
166	485	16	350	1	160	1	0
167	485	16	350	1	160	1	0
168	485	16	0	0	0	0	0
169	485	16	350	1	160	1	0
170	485	16	0	0	0	0	0
171	485	16	350	1	160	1	0
172	485	16	350	1	160	1	0
173	485	16	0	0	0	0	0
174	500	1	0	0	0	0	0
175	300	1	500	1	0	0	400
176	500	1	0	0	0	0	400
177	500	1	0	0	0	0	400

178	300	1	0	0	0	0	400
179	300	1	0	0	0	0	400
180	400	1	0	0	0	0	123
181	300	1	0	0	0	0	100
182	300	1	0	0	0	0	100
183	300	1	0	0	0	0	100
184	300	1	0	0	0	0	100
185	400	1	0	0	0	0	120
186	400	1	0	0	0	0	120
187	400	1	0	0	0	0	120
188	400	1	0	0	0	0	120
189	400	1	0	0	0	0	120
190	400	1	0	0	0	0	120
191	500	300	0	0	0	0	0
192	500	300	0	0	0	0	0
193	500	300	0	0	0	0	0
194	500	300	0	0	0	0	0
195	400	1	0	0	0	0	0
196	400	1	0	0	0	0	0
197	400	1	0	0	0	0	0
198	400	1	0	0	0	0	0
199	400	1	0	0	0	0	0
200	500	2	0	0	0	0	220
201	500	2	0	0	0	0	220
202	350	8	0	0	0	0	100
203	350	8	0	0	0	0	100
204	350	8	0	0	0	0	100
205	350	8	0	0	0	0	100
206	350	8	0	0	0	0	100
207	370	12	0	0	0	0	105
208	370	12	0	0	0	0	105
209	370	12	0	0	0	0	105
210	370	12	0	0	0	0	105
211	370	12	0	0	0	0	105
212	370	12	0	0	0	0	105
213	370	12	0	0	0	0	105
214	370	12	0	0	0	0	105
215	370	12	0	0	0	0	105
216	370	12	0	0	0	0	105
217	370	12	0	0	0	0	105
218	370	12	0	0	0	0	105
219	400	1	0	0	0	0	110
220	400	1	0	0	0	0	110
221	400	1	0	0	0	0	110
222	400	1	0	0	0	0	110
223	400	1	0	0	0	0	110
224	400	1	0	0	0	0	110
225	400	1	0	0	0	0	110

226	400	1	0	0	0	0	110
227	400	1	0	0	0	0	110
228	400	1	0	0	0	0	110
229	400	1	0	0	0	0	110
230	400	1	0	0	0	0	110
231	400	1	0	0	0	0	110
232	400	1	0	0	0	0	110
233	400	1	0	0	0	0	110
234	400	1	0	0	0	0	110
235	400	1	0	0	0	0	110
236	400	1	0	0	0	0	110
237	400	1	0	0	0	0	110
238	400	1	0	0	0	0	110
239	400	1	0	0	0	0	110
240	400	1	0	0	0	0	110
241	400	1	0	0	0	0	110
242	400	1	0	0	0	0	110
243	400	1	0	0	0	0	110
244	400	1	0	0	0	0	110
245	400	1	0	0	0	0	110
246	400	1	0	0	0	0	110
247	400	1	0	0	0	0	110
248	400	1	0	0	0	0	110
249	400	1	0	0	0	0	110
250	400	1	0	0	0	0	110
251	400	1	0	0	0	0	110
252	400	1	0	0	0	0	110
253	400	1	0	0	0	0	110
254	400	1	0	0	0	0	110
255	400	1	0	0	0	0	110
256	400	1	0	0	0	0	110
257	400	1	0	0	0	0	110
258	400	1	0	0	0	0	110
259	350	1	0	0	0	0	300
260	300	3	200	3	400	15	110
261	300	3	200	3	400	15	110
262	300	3	200	3	400	15	110
263	300	3	200	3	400	15	110
264	300	3	200	3	400	15	110
265	300	3	200	3	400	15	110
266	300	3	200	3	400	15	110
267	300	3	200	3	400	15	110
268	300	3	200	3	400	15	110
269	300	3	200	3	400	15	110
270	300	3	200	3	400	15	110
271	300	3	200	3	400	15	110
272	300	3	200	3	400	15	110
273	300	3	200	3	400	15	110

274	300	3	200	3	400	15	110
275	300	3	200	3	400	15	110
276	300	3	200	3	400	15	110
277	300	3	200	3	400	15	110
278	300	3	200	3	400	15	110
279	300	3	200	3	400	15	110
280	400	12	0	0	0	0	0
281	400	12	0	0	0	0	0
282	0	0	0	0	0	0	0
283	400	12	0	0	0	0	0
284	400	12	0	0	0	0	0
285	450	0	450	0	400	12	0
286	400	12	0	0	0	0	0
287	400	12	0	0	0	0	0
288	0	0	0	0	0	0	0
289	400	12	0	0	0	0	0
290	0	0	0	0	0	0	0
291	450	0	450	0	400	12	0
292	400	12	0	0	0	0	0
293	400	12	0	0	0	0	0
294	400	12	0	0	0	0	0
295	450	0	450	0	400	12	0
296	400	12	0	0	0	0	0
297	400	12	0	0	0	0	0
298	400	12	0	0	0	0	0
299	400	12	0	0	0	0	0
300	400	12	0	0	0	0	0
301	400	12	0	0	0	0	0
302	400	12	0	0	0	0	0
303	400	12	0	0	0	0	0
304	400	12	0	0	0	0	0
305	400	12	0	0	0	0	0
306	400	12	0	0	0	0	0
307	400	12	0	0	0	0	0
308	400	12	0	0	0	0	0
309	400	12	0	0	0	0	0
310	400	12	0	0	0	0	0
311	400	12	0	0	0	0	0
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313	400	12	0	0	0	0	0
314	400	12	0	0	0	0	0
315	400	12	0	0	0	0	0
316	400	12	0	0	0	0	0
317	400	12	0	0	0	0	0
318	400	12	0	0	0	0	0
319	250	0,5	300	0,3	400	0,5	250
320	250	0,5	300	0,3	400	0,5	250
321	250	0,5	300	0,3	400	0,5	250

322	250	0,5	300	0,3	400	0,5	250
323	250	0,5	300	0,3	400	0,5	250
324	250	0,5	300	0,3	400	0,5	250
325	250	0,5	300	0,3	400	0,5	250
326	250	0,5	300	0,3	400	0,5	250
327	250	0,5	300	0,3	400	0,5	250
328	250	0,5	300	0,3	400	0,5	250
329	250	0,5	300	0,3	400	0,5	250
330	250	0,5	300	0,3	400	0,5	250
331	250	0,5	300	0,3	400	0,5	250
332	250	0,5	300	0,3	400	0,5	250
333	250	0,5	300	0,3	400	0,5	250
334	250	0,5	300	0,3	400	0,5	250
335	250	0,5	300	0,3	400	0,5	250
336	250	0,5	300	0,3	400	0,5	250
337	250	0,5	300	0,3	400	0,5	250
338	250	0,5	300	0,3	400	0,5	250
339	250	0,5	300	0,3	400	0,5	250
340	250	0,5	300	0,3	400	0,5	250
341	250	0,5	300	0,3	400	0,5	250
342	250	0,5	300	0,3	400	0,5	250
343	250	0,5	300	0,3	400	0,5	250
344	250	0,5	300	0,3	400	0,5	250
345	250	0,5	300	0,3	400	0,5	250
346	250	0,5	300	0,3	400	0,5	250
347	250	0,5	300	0,3	400	0,5	250
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354	250	0,5	300	0,3	400	0,5	250
355	250	0,5	300	0,3	400	0,5	250
356	250	0,5	300	0,3	400	0,5	250
357	250	0,5	300	0,3	400	0,5	250
358	250	0,5	300	0,3	400	0,5	250
359	250	0,5	300	0,3	400	0,5	250
360	250	0,5	300	0,3	400	0,5	250
361	250	0,5	300	0,3	400	0,5	250
362	250	0,5	300	0,3	400	0,5	250
363	250	0,5	300	0,3	400	0,5	250
364	400	12	0	0	0	0	0
365	400	12	0	0	0	0	0
366	400	12	0	0	0	0	0
367	400	12	0	0	0	0	0
368	400	12	0	0	0	0	0
369	400	12	0	0	0	0	0

370	400	12	0	0	0	0	0
371	400	12	0	0	0	0	0
372	400	12	0	0	0	0	0
373	400	12	0	0	0	0	0
374	400	12	0	0	0	0	0
375	400	12	0	0	0	0	0
376	400	12	0	0	0	0	0
377	400	12	0	0	0	0	0
378	400	12	0	0	0	0	0
379	400	12	0	0	0	0	0
380	400	12	0	0	0	0	0
381	430	0,33	0	0	0	0	250
382	350	0,33	0	0	0	0	300
383	430	0,33	0	0	0	0	250
384	430	0,33	0	0	0	0	500
385	430	0,33	0	0	0	0	500
386	350	0,33	0	0	0	0	500
387	350	0,33	0	0	0	0	250
388	350	0,33	0	0	0	0	250
389	350	0,33	0	0	0	0	300
390	430	0,33	0	0	0	0	300
391	430	0,33	0	0	0	0	300
392	350	0,33	0	0	0	0	500
393	430	0,33	0	0	0	0	250
394	350	0,33	0	0	0	0	300
395	350	0,33	0	0	0	0	250
396	430	0,33	0	0	0	0	250
397	430	0,33	0	0	0	0	500
398	350	0,33	0	0	0	0	300
399	350	0,33	0	0	0	0	300
400	350	0,33	0	0	0	0	300
401	200	3	250	16	0	0	0
402	200	3	300	16	0	0	0
403	200	3	300	16	0	0	0
404	200	3	300	16	0	0	0
405	200	3	250	16	0	0	0
406	200	3	250	16	0	0	0
407	200	3	300	16	0	0	0
408	200	3	250	16	0	0	0
409	200	3	250	16	0	0	0
410	200	3	300	16	0	0	0
411	200	3	300	16	0	0	0
412	200	3	300	16	0	0	0
413	200	3	300	16	0	0	0
414	200	3	300	16	0	0	0
415	200	3	250	16	0	0	0
416	350	0	0	0	0	0	320
417	350	0	0	0	0	0	320

418	350	0	0	0	0	0	320
419	350	0	0	0	0	0	320

Nº	0 st time	O ₂	HC	WT	Log r
1	0	0	6,5	160	-4,814
2	0	0	6,5	160	-5,912
3	0	0	6,5	160	-4,777
4	0	0	9	160	-3,567
5	0	0	6,5	160	-5,059
6	0	0	6,5	160	-4,566
7	0	0	6,5	160	-3,772
8	0	0	6,5	160	-5,761
9	0	0	9	160	-3,586
10	0	0	6,5	160	-5,529
11	24	0	6,5	191	-6,287
12	4	0	6,5	191	-6,784
13	0	0	12	118	-4,696
14	5,5	0	10	330	-3,476
15	7	0	10	330	-3,241
16	7	0	10	330	-4
17	7	0	10	330	-3,436
18	7	0	10	330	-3,969
19	7	0	10	330	-3,933
20	7	0	10	330	-3,803
21	7	0	10	330	-3,722
22	5,5	0	10	330	-3,532
23	7	0	10	330	-3,793
24	7	0	10	330	-3,511
25	7	0	10	330	-3,488
26	7	0	10	330	-3,703
27	7	0	10	330	-3,53
28	7	0	10	330	-3,832
29	7	0	10	330	-3,919
30	7	0	10	330	-4,305
31	7	0	10	330	-3,74
32	7	0	10	330	-4,124
33	7	0	10	117	-6,333
34	7	0	10	117	-6,668
35	7	0	10	117	-6,732
36	7	0	10	117	-5,814
37	7	0	10	242	-4,255
38	7	0	10	242	-3,808
39	7	0	10	242	-5,12
40	7	0	10	242	-4,691
41	7	0	10	242	-4,75
42	7	0	10	242	-3,85
43	7	0	10	117	-6,618

44	2	0	4	346	-4,442
45	2	0	4	463	-4,688
46	2	0	4	275	-4,433
47	2	0	4	321	-4,442
48	4	0	7	230	-10,8
49	4	0	7	230	-9,337
50	0	0	4	430	-4,063
51	0	0	4	392	-3,87
52	0	0	4	434	-4,063
53	0	0	4	425	-3,795
54	0	0	4	363	-3,87
55	0	0	4	442	-3,795
56	0	0	4	425	-3,87
57	0	0	4	349	-3,795
58	0	0	4	427	-4,063
59	0	0	4	434	-3,87
60	0	0	20	327	-4,708
61	0	0	15	200	-6,108
62	0	0	9	200	-5,88
63	0	0	9	200	-6,247
64	0	0	8	200	-6,187
65	0	0	4,5	200	-4,639
66	0	0	3	200	-4,759
67	0	0	18	200	-6,47
68	0	0	30	200	-6,363
69	0	0	12,85	200	-6,339
70	0	0	18	200	-5,627
71	0	0	3	200	-4,754
72	0	0	1	200	-5,675
73	0	0	22,5	200	-6,622
74	0	0	6	200	-5,498
75	0	0	15	200	-6,383
76	0	0	3	200	-5,41
77	0	0	27,27	200	-5,764
78	0	0	12,85	200	-6,054
79	0	0	18	200	-6,193
80	0	0	8	200	-5,77
81	0	1	10	160	-5,176
82	0	0	10	160	-5,737
83	0	1	10	160	-4,875
84	0	1	10	160	-4,474
85	0	0	10	160	-4,47
86	0	0	10	160	-5,884
87	0	1	10	160	-5,552
88	0	0	10	160	-6,326
89	0	1	10	160	-5,913
90	1	0	10	354	-4,785
91	1	0	10	160	-3,604

92	1	0	10	160	-4,082
93	1	1	10	160	-3,484
94	0	0	10	160	-5,264
95	0	1	10	160	-3,953
96	0	1	10	160	-3,475
97	0	0	10	160	-3,758
98	0	0	10	160	-3,604
99	0	1	10	160	-4,255
100	0	1	10	160	-4,57
101	0	0	10	160	-3,857
102	0	0	10	160	-4,323
103	0	1	10	160	-3,214
104	0	1	10	160	-2,91
105	0	1	10	160	-3,241
106	0	0	10	160	-3,894
107	0	1	10	160	-3,175
108	0	0	10	160	-4,548
109	0	0	10	160	-4,556
110	0	0	10	160	-4,579
111	0	0	10	160	-4,923
112	0	1	10	160	-3,131
113	0	0	10	160	-5,687
114	0	0	10	160	-5,474
115	0	1	10	160	-3,471
116	0	0	10	160	-5,622
117	0	1	10	160	-2,998
118	0	1	10	160	-3,241
119	0	0	10	160	-5,242
120	0	0	10	160	-5,079
121	0	1	10	160	-3,213
122	0	0	10	160	-4,941
123	0	1	10	160	-3,224
124	0	0	10	160	-4,832
125	0	1	17	160	-4,011
126	0	0	17	160	-4,835
127	0	0	17	160	-4,899
128	0	0	17	160	-5,266
129	0	1	17	160	-3,576
130	0	1	17	160	-3,763
131	0	0	17	160	-5,039
132	0	1	10	160	-4,039
133	0	0	17	160	-4,358
134	0	1	17	160	-3,871
135	0	1	10	160	-3,171
136	0	0	10	160	-3,774
137	0	0	10	160	-3,762
138	0	0	10	160	-3,497
139	0	0	10	160	-3,221

140	0	0	10	160	-3,803
141	0	1	10	160	-2,747
142	0	0	10	160	-4,933
143	0	1	10	160	-2,85
144	0	0	10	160	-4,548
145	0	1	10	160	-4,607
146	0	0	10	160	-4,477
147	0	1	10	160	-4,757
148	0	1	10	160	-4,42
149	0	1	10	160	-5
150	0	0	10	160	-4,824
151	0	0	10	160	-4,255
152	0	0	10	160	-4,923
153	0	0	10	160	-4,068
154	0	1	10	160	-4,167
155	0	1	10	160	-4,965
156	0	1	10	160	-4,8
157	0	1	10	160	-4,57
158	0	0	10	160	-3,956
159	0	1	10	160	-4,642
160	0	1	10	187	-5
161	0	1	10	187	-5,41
162	0	1	10	187	-5,857
163	12	0	10	237	-5,301
164	0	0	10	237	-5,079
165	0	1	10	187	-6,255
166	0	1	10	187	-4,303
167	0	1	10	237	-4,67
168	0	0	10	187	-4,648
169	0	1	10	187	-4,913
170	0	0	10	237	-3,977
171	0	1	10	187	-5,857
172	0	1	10	237	-3,785
173	0	0	10	187	-5,158
174	0	0	10	200	-5,74
175	12	0	6,7	205	-5,921
176	12	0	6,7	205	-6,854
177	12	0	6,7	205	-6,921
178	12	0	6,7	205	-5,959
179	12	0	6,7	205	-5,31
180	1	0	18	400	-6
181	2	0	5	321	-5,64
182	2	0	5	321	-6,044
183	2	0	5	321	-6,675
184	2	0	5	321	-6,894
185	24	0	3,3	200	-4,312
186	24	0	3,3	200	-5,185
187	24	0	3,3	200	-4,395

188	24	0	3,3	200	-4,357
189	24	0	3,3	200	-4,302
190	24	0	3,3	200	-3,639
191	0	0	10	208	-4,268
192	0	0	10	208	-3,469
193	0	0	10	208	-4,022
194	0	0	10	208	-3,721
195	0	0	6	257	-4,844
196	0	0	6	227	-3,481
197	0	0	6	227	-4,674
198	0	0	6	227	-6,138
199	0	0	6	227	-5,706
200	2	0	11	352	-4,732
201	2	0	11	352	-4,195
202	1	0	9	300	-4,965
203	1	0	9	300	-4,648
204	1	0	9	300	-4,664
205	1	0	9	300	-4,59
206	1	0	9	300	-4,503
207	12	0	20	177	-5,674
208	12	0	3,33	177	-4,637
209	12	0	2	177	-4,65
210	12	0	6,66	177	-5,242
211	12	0	10	177	-5,999
212	12	0	6,66	177	-5,446
213	12	0	13,3	177	-6,096
214	12	0	13,33	246	-7,824
215	12	0	3,33	246	-6,83
216	12	0	20	246	-7,737
217	12	0	0,6	177	-4,451
218	12	0	20	177	-5,902
219	8	0	10	111	-4,391
220	8	0	10	140	-3,341
221	8	0	10	189	-4,498
222	8	0	10	178	-4,882
223	8	0	10	159	-5,302
224	8	0	10	97	-4,4
225	8	0	10	119	-3,403
226	8	0	10	187	-4,235
227	8	0	10	78	-4,952
228	8	0	10	182	-5,066
229	8	0	10	118	-5,161
230	8	0	10	202	-3,779
231	8	0	10	207	-4,082
232	8	0	10	121	-3,701
233	8	0	10	209	-4,237
234	8	0	10	74	-4,764
235	8	0	10	190	-3,939

236	8	0	10	164	-5,12
237	8	0	10	200	-4,538
238	8	0	10	227	-3,383
239	8	0	10	175	-4,747
240	8	0	10	140	-5,401
241	8	0	10	93	-4,066
242	8	0	10	192	-3,675
243	8	0	10	119	-5,147
244	8	0	10	162	-4,763
245	8	0	10	172	-5,047
246	8	0	10	101	-3,986
247	8	0	10	184,5	-4,781
248	8	0	10	131	-3,683
249	8	0	10	118	-3,421
250	8	0	10	126	-4,202
251	8	0	10	130	-5,355
252	8	0	10	121	-3,403
253	8	0	10	182	-4,618
254	8	0	10	182	-5,196
255	8	0	10	120	-4,146
256	8	0	10	165	-4,779
257	8	0	10	204	-3,445
258	8	0	10	152	-3,881
259	5	0	50	220	-6,721
260	12	1	44	333	-6,019
261	12	1	44	229	-5,945
262	12	1	44	187	-7,922
263	12	1	44	342	-5,144
264	12	1	44	263	-6,36
265	12	1	44	364	-5,57
266	12	1	44	207	-5,761
267	12	1	44	282	-6,11
268	12	1	44	218	-6,746
269	12	1	44	270	-6,223
270	12	1	44	198	-7,499
271	12	1	44	254	-6,475
272	12	1	44	307	-5,337
273	12	1	44	218	-6,26
274	12	1	44	235	-7,077
275	12	1	44	267	-4,424
276	12	1	44	146	-6,223
277	12	1	44	245	-5,304
278	12	1	44	356	-5,269
279	12	1	44	187	-6,968
280	0	0	10,4	185	-4,23
281	0	0	10,4	185	-4,141
282	0	0	6,4	185	-5,234
283	0	0	56	200	-6,421

284	0	0	6,4	185	-4,646
285	0	1	56	200	-5,434
286	0	0	17,4	185	-4,699
287	0	0	17,4	185	-4,093
288	0	0	10,4	185	-5,204
289	0	0	10,4	185	-4,012
290	0	0	17,4	185	-5,313
291	0	1	6,4	185	-4,454
292	0	0	56	200	-6,581
293	0	0	10,4	185	-5,024
294	0	0	56	200	-5,593
295	0	1	17,4	185	-4,175
296	0	0	6,4	185	-5,502
297	0	0	6,4	185	-4,379
298	0	0	17,4	185	-5,104
299	0	0	10,4	185	-4,875
300	0	0	17,4	185	-5,024
301	0	0	10,4	185	-5,166
302	0	0	6,4	185	-4,929
303	0	0	6,4	185	-4,847
304	0	0	56	200	-5,607
305	0	0	17,4	185	-4,189
306	0	0	56	200	-6,393
307	0	0	17,4	185	-4,836
308	0	0	17,4	185	-5,058
309	0	0	10,4	185	-4,72
310	0	0	56	200	-6,41
311	0	0	17,4	185	-4,098
312	0	0	56	200	-5,567
313	0	0	10,4	185	-5,14
314	0	0	56	200	-6,662
315	0	0	17,4	185	-4,044
316	0	0	56	200	-5,909
317	0	0	10,4	185	-5,217
318	0	0	10,4	185	-4,244
319	2	1	9	241	-5,543
320	2	1	9	234	-5,481
321	2	1	9	247,5	-4,763
322	2	1	9	244	-4,817
323	2	1	9	248,5	-4,756
324	2	1	9	237,5	-5,252
325	2	1	9	247	-4,873
326	2	1	9	215,5	-7,139
327	2	1	9	215	-7,066
328	2	1	9	248	-5,317
329	2	1	9	241	-5,696
330	2	1	9	248	-4,849
331	2	1	9	232	-5,868

332	2	1	9	246	-5,288
333	2	1	9	219,5	-6,743
334	2	1	9	239	-5,779
335	2	1	9	237	-5,737
336	2	1	9	220	-6,659
337	2	1	9	251	-5,036
338	2	1	9	237	-5,619
339	2	1	9	236	-5,661
340	2	1	9	222	-6,909
341	2	1	9	251	-5,019
342	2	1	9	235	-5,498
343	2	1	9	225	-6,094
344	2	1	9	241	-5,648
345	2	1	9	222,5	-6,293
346	2	1	9	239	-5,783
347	2	1	9	250,5	-5,125
348	2	1	9	231	-6,088
349	2	1	9	247,5	-5,294
350	2	1	9	220,5	-6,686
351	2	1	9	221	-6,735
352	2	1	9	231	-5,754
353	2	1	9	231	-6,097
354	2	1	9	231,5	-5,797
355	2	1	9	230,5	-6,216
356	2	1	9	230,5	-5,827
357	2	1	9	221	-7,095
358	2	1	9	232	-5,832
359	2	1	9	238	-5,199
360	2	1	9	226	-6,343
361	2	1	9	249	-4,715
362	2	1	9	232	-6,307
363	2	1	9	239	-5,28
364	0	0	44	200	-5,545
365	0	0	9,4	185	-6,938
366	0	0	9,4	185	-4,783
367	0	0	44	200	-5,651
368	0	0	9,4	185	-6,306
369	0	0	9,4	185	-5,239
370	0	0	14	185	-6,233
371	0	0	9,4	185	-4,253
372	0	0	44	200	-6,051
373	0	0	9,4	185	-4,652
374	0	0	14	185	-4,575
375	0	0	14	185	-6,892
376	0	0	14	185	-5,186
377	0	0	14	185	-5,097
378	0	0	14	185	-4,044
379	0	0	9,4	185	-4,141

380	0	0	14	185	-4,411
381	3	0	9	255	-4,375
382	3	0	9	269,5	-4,053
383	3	0	9	240,5	-4,804
384	3	0	9	269	-3,854
385	3	0	9	260	-3,87
386	3	0	9	254	-4,089
387	3	0	9	237	-4,524
388	3	0	9	250	-4,569
389	3	0	9	280	-3,618
390	3	0	9	244	-3,857
391	3	0	9	228,5	-4,4
392	3	0	9	229	-4,52
393	3	0	9	261	-3,939
394	3	0	9	228,5	-4,721
395	3	0	9	251	-3,91
396	3	0	9	271	-4,434
397	3	0	9	259	-4,116
398	3	0	9	244	-3,697
399	3	0	9	240,5	-4,19
400	3	0	9	230	-4,254
401	0	0	13	270	-4,441
402	0	0	13	235	-5,458
403	0	0	13	239	-6,178
404	0	0	13	302	-4,84
405	0	0	13	292	-4,994
406	0	0	13	270	-4,947
407	0	0	13	212	-6,081
408	0	0	13	226	-6,303
409	0	0	13	231	-5,418
410	0	0	13	290	-4,954
411	0	0	13	270	-5,099
412	0	0	13	270	-4,468
413	0	0	13	270	-5,418
414	0	0	13	220	-6,002
415	0	0	13	205	-6,081
416	3	0	36	200	-5,037
417	3	0	50	300	-6,627
418	3	0	36	243	-4,451
419	3	0	36	222	-4,744

Python3 code for Random Forest:

```

from numpy import mean, std                                     # Used modules
import pandas as pd
from sklearn.model_selection import cross_val_score, RepeatedKFold, train_test_split
from sklearn.ensemble import RandomForestRegressor

```

```

from sklearn.inspection import permutation_importance
from sklearn.metrics import mean_absolute_error

dataframe = pd.read_excel('Data.xlsx', header=0) # Read dataset for model
building from Data.xlsx
feature_list=dataframe.columns[:-1]
Xr, Yr = dataframe.values[:, :-1], dataframe.values[:, -1]
(X,Xtest,Y,Ytest) = train_test_split(Xr,Yr,test_size=0.2) # Splitting dataset to training (80%)
and test (20%)
model = RandomForestRegressor() # Regression Random Forest
Model
cv = RepeatedKfold(n_splits=5, n_repeats=10) # Cross-validation test
n_scores = cross_val_score(model, Xr, Yr, scoring='neg_mean_absolute_error', cv=cv, n_jobs=-1,
error_score='raise')
print('MAE cross validation: %.3f (%.3f)' % (-mean(n_scores), std(n_scores))+'\n')
model.fit(X, Y) # Fit the model on the training dataset
print('MAE(training dataset): %.3f' % (mean_absolute_error(Y,model.predict(X))))
print('MAE(test dataset) : %.3f' % (mean_absolute_error(Ytest,model.predict(Xtest))))+'\n')

importances = permutation_importance(model, X, Y,
scoring='neg_mean_squared_error').importances_mean # Importance parameters estimation
print('Importances of parameters:')
j = 0
for ind in importances:
j+=1
print('Parameter '+str(j)+' ('+feature_list[j-1]+'): '+str(round(100*ind/sum(importances)))+ '%')
input('P.S.: Obtained parameters can vary from run to run. Press Enter to exit...')

```

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