

File - driver

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1 C:\Users\chris\AppData\Local\Microsoft\WindowsApps\python3.8.exe C:/Users/chris/github-iu/
  p434/assignments/distributed-kv/driver.py -s -v
2 Node 3 started on 127.0.0.1:34568! Using sequential consistency...
3 Node 3 Verbose Logging Enabled!
4 Node 1 started on 127.0.0.1:34566! Using sequential consistency...
5 Node 1 Verbose Logging Enabled!
6 Node 2 started on 127.0.0.1:34567! Using sequential consistency...
7 Node 2 Verbose Logging Enabled!
8 Client 0 started with sequential consistency
9 Client 1 started with sequential consistency
10 Node 1 -> Key turpis, Value libero
11 Client 0 Node 1 - PUT turpis, libero
12 Client 0 Delay: 1.0367276046970644 seconds
13 Node 1 -> Key lobortis, Value vulputate
14 Client 1 Node 1 - PUT lobortis, vulputate
15 Client 1 Delay: 1.1194795568289302 seconds
16 Node 2 Updated! -> Key turpis, Value libero
17 Node 3 Updated! -> Key turpis, Value libero
18 Node 2 Updated! -> Key lobortis, Value vulputate
19 Node 3 Updated! -> Key lobortis, Value vulputate
20 Node 1 GET -> Key turpis
21 Client 0 Node 1 - GET turpis -> Result libero --> Expected libero
22 Node 2 GET -> Key turpis
23 Client 0 Node 2 - GET turpis -> Result libero --> Expected libero
24 Node 3 GET -> Key turpis
25 Client 0 Node 3 - GET turpis -> Result libero --> Expected libero
26
27 Node 1 -> Key magna, Value magna
28 Client 0 Node 1 - PUT magna, magna
29 Client 0 Delay: 0.6748117937885793 seconds
30 Node 1 GET -> Key lobortis
31 Client 1 Node 1 - GET lobortis -> Result vulputate --> Expected vulputate
32 Node 2 GET -> Key lobortis
33 Client 1 Node 2 - GET lobortis -> Result vulputate --> Expected vulputate
34 Node 3 GET -> Key lobortis
35 Client 1 Node 3 - GET lobortis -> Result vulputate --> Expected vulputate
36
37 Node 1 -> Key nulla, Value Maecenas
38 Client 1 Node 1 - PUT nulla, Maecenas
39 Client 1 Delay: 0.6860529241149331 seconds
40 Node 2 Updated! -> Key magna, Value magna
41 Node 3 Updated! -> Key magna, Value magna
42 Node 1 GET -> Key magna
43 Client 0 Node 1 - GET magna -> Result magna --> Expected magna
44 Node 2 GET -> Key magna
45 Client 0 Node 2 - GET magna -> Result magna --> Expected magna
46 Node 3 GET -> Key magna
47 Client 0 Node 3 - GET magna -> Result magna --> Expected magna
48
49 Node 1 -> Key tempus, Value Mauris
50 Client 0 Node 1 - PUT tempus, Mauris
51 Client 0 Delay: 1.0686189559691612 seconds
52 Node 1 GET -> Key nulla
53 Client 1 Node 1 - GET nulla -> Result Maecenas --> Expected Maecenas
54 Node 2 GET -> Key nulla
55 Client 1 Node 2 - GET nulla -> Result NULL --> Expected Maecenas
56 Node 3 GET -> Key nulla
57 Client 1 Node 3 - GET nulla -> Result NULL --> Expected Maecenas
58
59 Node 1 -> Key Nulla, Value ipsum
60 Client 1 Node 1 - PUT Nulla, ipsum
61 Client 1 Delay: 0.5806918298803277 seconds
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```
62 Node 2 Updated! -> Key nulla, Value Maecenas
63 Node 3 Updated! -> Key nulla, Value Maecenas
64 Node 1 GET -> Key Nulla
65 Client 1 Node 1 - GET Nulla -> Result ipsum --> Expected ipsum
66 Node 2 GET -> Key Nulla
67 Client 1 Node 2 - GET Nulla -> Result NULL --> Expected ipsum
68 Node 3 GET -> Key Nulla
69 Client 1 Node 3 - GET Nulla -> Result NULL --> Expected ipsum
70
71 Node 1 -> Key sed, Value nec
72 Client 1 Node 1 - PUT sed, nec
73 Client 1 Delay: 0.8600053031513049 seconds
74 Node 1 GET -> Key tempus
75 Client 0 Node 1 - GET tempus -> Result Mauris --> Expected Mauris
76 Node 2 GET -> Key tempus
77 Client 0 Node 2 - GET tempus -> Result NULL --> Expected Mauris
78 Node 3 GET -> Key tempus
79 Client 0 Node 3 - GET tempus -> Result NULL --> Expected Mauris
80
81 Node 1 -> Key nec, Value accumsan
82 Client 0 Node 1 - PUT nec, accumsan
83 Client 0 Delay: 0.7145924142669235 seconds
84 Node 2 Updated! -> Key tempus, Value Mauris
85 Node 3 Updated! -> Key tempus, Value Mauris
86 Node 1 GET -> Key sed
87 Client 1 Node 1 - GET sed -> Result nec --> Expected nec
88 Node 2 GET -> Key sed
89 Client 1 Node 2 - GET sed -> Result NULL --> Expected nec
90 Node 3 GET -> Key sed
91 Client 1 Node 3 - GET sed -> Result NULL --> Expected nec
92
93 Node 1 -> Key tempus, Value elementum
94 Client 1 Node 1 - PUT tempus, elementum
95 Client 1 Delay: 0.5752889678336941 seconds
96 Node 1 GET -> Key nec
97 Client 0 Node 1 - GET nec -> Result accumsan --> Expected accumsan
98 Node 2 GET -> Key nec
99 Client 0 Node 2 - GET nec -> Result NULL --> Expected accumsan
100 Node 3 GET -> Key nec
101 Client 0 Node 3 - GET nec -> Result NULL --> Expected accumsan
102
103 Node 1 -> Key sapien, Value Suspendisse
104 Client 0 Node 1 - PUT sapien, Suspendisse
105 Client 0 Delay: 0.851824669970056 seconds
106 Node 2 Updated! -> Key Nulla, Value ipsum
107 Node 3 Updated! -> Key Nulla, Value ipsum
108 Node 1 GET -> Key tempus
109 Client 1 Node 1 - GET tempus -> Result elementum --> Expected elementum
110 Node 2 GET -> Key tempus
111 Client 1 Node 2 - GET tempus -> Result Mauris --> Expected elementum
112 Node 3 GET -> Key tempus
113 Client 1 Node 3 - GET tempus -> Result Mauris --> Expected elementum
114
115 Node 1 -> Key ornare, Value tempor
116 Client 1 Node 1 - PUT ornare, tempor
117 Client 1 Delay: 0.5962001100738026 seconds
118 Node 2 Updated! -> Key sed, Value nec
119 Node 3 Updated! -> Key sed, Value nec
120 Node 1 GET -> Key sapien
121 Client 0 Node 1 - GET sapien -> Result Suspendisse --> Expected Suspendisse
122 Node 2 GET -> Key sapien
123 Client 0 Node 2 - GET sapien -> Result NULL --> Expected Suspendisse
```

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```
124 Node 3 GET -> Key sapien
125 Client 0 Node 3 - GET sapien -> Result NULL --> Expected Suspendisse
126
127 Node 1 -> Key at, Value dolor
128 Client 0 Node 1 - PUT at, dolor
129 Client 0 Delay: 0.9965438926985004 seconds
130 Node 2 Updated! -> Key nec, Value accumsan
131 Node 3 Updated! -> Key nec, Value accumsan
132 Node 1 GET -> Key ornare
133 Client 1 Node 1 - GET ornare -> Result tempor --> Expected tempor
134 Node 2 GET -> Key ornare
135 Client 1 Node 2 - GET ornare -> Result NULL --> Expected tempor
136 Node 3 GET -> Key ornare
137 Client 1 Node 3 - GET ornare -> Result NULL --> Expected tempor
138
139 Node 1 -> Key facilisis, Value Donec
140 Client 1 Node 1 - PUT facilisis, Donec
141 Client 1 Delay: 0.7235131931443349 seconds
142 Node 2 Updated! -> Key tempus, Value elementum
143 Node 3 Updated! -> Key tempus, Value elementum
144 Node 1 GET -> Key facilisis
145 Client 1 Node 1 - GET facilisis -> Result Donec --> Expected Donec
146 Node 2 GET -> Key facilisis
147 Client 1 Node 2 - GET facilisis -> Result NULL --> Expected Donec
148 Node 3 GET -> Key facilisis
149 Client 1 Node 3 - GET facilisis -> Result NULL --> Expected Donec
150
151 Node 1 -> Key elit, Value magna
152 Client 1 Node 1 - PUT elit, magna
153 Client 1 Delay: 0.9204358674798923 seconds
154 Node 1 GET -> Key at
155 Client 0 Node 1 - GET at -> Result dolor --> Expected dolor
156 Node 2 GET -> Key at
157 Client 0 Node 2 - GET at -> Result NULL --> Expected dolor
158 Node 3 GET -> Key at
159 Client 0 Node 3 - GET at -> Result NULL --> Expected dolor
160
161 Node 1 -> Key interdum, Value pellentesque
162 Client 0 Node 1 - PUT interdum, pellentesque
163 Client 0 Delay: 1.1208691576631853 seconds
164 Node 2 Updated! -> Key sapien, Value Suspendisse
165 Node 3 Updated! -> Key sapien, Value Suspendisse
166 Node 2 Updated! -> Key ornare, Value tempor
167 Node 3 Updated! -> Key ornare, Value tempor
168 Node 1 GET -> Key elit
169 Client 1 Node 1 - GET elit -> Result magna --> Expected magna
170 Node 2 GET -> Key elit
171 Client 1 Node 2 - GET elit -> Result NULL --> Expected magna
172 Node 3 GET -> Key elit
173 Client 1 Node 3 - GET elit -> Result NULL --> Expected magna
174
175 Node 1 -> Key Suspendisse, Value eu
176 Client 1 Node 1 - PUT Suspendisse, eu
177 Client 1 Delay: 1.1501030429895527 seconds
178 Node 1 GET -> Key interdum
179 Client 0 Node 1 - GET interdum -> Result pellentesque --> Expected pellentesque
180 Node 2 GET -> Key interdum
181 Client 0 Node 2 - GET interdum -> Result NULL --> Expected pellentesque
182 Node 3 GET -> Key interdum
183 Client 0 Node 3 - GET interdum -> Result NULL --> Expected pellentesque
184
185 Node 1 -> Key fermentum, Value Duis
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```
186 Client 0 Node 1 - PUT fermentum, Duis
187 Client 0 Delay: 0.995754683772948 seconds
188 Node 2 Updated! -> Key at, Value dolor
189 Node 3 Updated! -> Key at, Value dolor
190 Node 2 Updated! -> Key facilisis, Value Donec
191 Node 3 Updated! -> Key facilisis, Value Donec
192 Node 1 GET -> Key Suspendisse
193 Client 1 Node 1 - GET Suspendisse -> Result eu --> Expected eu
194 Node 2 GET -> Key Suspendisse
195 Client 1 Node 2 - GET Suspendisse -> Result NULL --> Expected eu
196 Node 3 GET -> Key Suspendisse
197 Client 1 Node 3 - GET Suspendisse -> Result NULL --> Expected eu
198
199 Node 1 -> Key purus, Value porta
200 Client 1 Node 1 - PUT purus, porta
201 Client 1 Delay: 0.6883722579343475 seconds
202 Node 1 GET -> Key fermentum
203 Client 0 Node 1 - GET fermentum -> Result Duis --> Expected Duis
204 Node 2 GET -> Key fermentum
205 Client 0 Node 2 - GET fermentum -> Result NULL --> Expected Duis
206 Node 3 GET -> Key fermentum
207 Client 0 Node 3 - GET fermentum -> Result NULL --> Expected Duis
208
209 Node 1 -> Key nulla, Value Nullam
210 Client 0 Node 1 - PUT nulla, Nullam
211 Client 0 Delay: 1.1853070661919585 seconds
212 Node 2 Updated! -> Key elit, Value magna
213 Node 3 Updated! -> Key elit, Value magna
214 Node 1 GET -> Key purus
215 Client 1 Node 1 - GET purus -> Result porta --> Expected porta
216 Node 2 GET -> Key purus
217 Client 1 Node 2 - GET purus -> Result NULL --> Expected porta
218 Node 3 GET -> Key purus
219 Client 1 Node 3 - GET purus -> Result NULL --> Expected porta
220
221 Node 1 -> Key cursus, Value vitae
222 Client 1 Node 1 - PUT cursus, vitae
223 Client 1 Delay: 0.8408297737731838 seconds
224 Node 1 GET -> Key nulla
225 Client 0 Node 1 - GET nulla -> Result Nullam --> Expected Nullam
226 Node 2 GET -> Key nulla
227 Client 0 Node 2 - GET nulla -> Result Maecenas --> Expected Nullam
228 Node 3 GET -> Key nulla
229 Client 0 Node 3 - GET nulla -> Result Maecenas --> Expected Nullam
230
231 Node 1 -> Key mauris, Value Vestibulum
232 Client 0 Node 1 - PUT mauris, Vestibulum
233 Client 0 Delay: 1.1319139343402724 seconds
234 Node 2 Updated! -> Key interdum, Value pellentesque
235 Node 3 Updated! -> Key interdum, Value pellentesque
236 Node 1 GET -> Key cursus
237 Client 1 Node 1 - GET cursus -> Result vitae --> Expected vitae
238 Node 2 GET -> Key cursus
239 Client 1 Node 2 - GET cursus -> Result NULL --> Expected vitae
240 Node 3 GET -> Key cursus
241 Client 1 Node 3 - GET cursus -> Result NULL --> Expected vitae
242
243 Node 1 -> Key Nunc, Value Donec
244 Client 1 Node 1 - PUT Nunc, Donec
245 Client 1 Delay: 0.8326134160682099 seconds
246 Node 2 Updated! -> Key Suspendisse, Value eu
247 Node 3 Updated! -> Key Suspendisse, Value eu
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248 Node 1 GET -> Key Nunc
249 Client 1 Node 1 - GET Nunc -> Result Donec --> Expected Donec
250 Node 2 GET -> Key Nunc
251 Client 1 Node 2 - GET Nunc -> Result NULL --> Expected Donec
252 Node 3 GET -> Key Nunc
253 Client 1 Node 3 - GET Nunc -> Result NULL --> Expected Donec
254
255 Node 1 -> Key mattis, Value ut
256 Client 1 Node 1 - PUT mattis, ut
257 Client 1 Delay: 0.6786137659323748 seconds
258 Node 2 Updated! -> Key fermentum, Value Duis
259 Node 3 Updated! -> Key fermentum, Value Duis
260 Node 1 GET -> Key mauris
261 Client 0 Node 1 - GET mauris -> Result Vestibulum --> Expected Vestibulum
262 Node 2 GET -> Key mauris
263 Client 0 Node 2 - GET mauris -> Result NULL --> Expected Vestibulum
264 Node 3 GET -> Key mauris
265 Client 0 Node 3 - GET mauris -> Result NULL --> Expected Vestibulum
266
267 Node 1 -> Key elementum, Value orci
268 Client 0 Node 1 - PUT elementum, orci
269 Client 0 Delay: 0.7665797174015385 seconds
270 Node 2 Updated! -> Key purus, Value porta
271 Node 3 Updated! -> Key purus, Value porta
272 Node 1 GET -> Key mattis
273 Client 1 Node 1 - GET mattis -> Result ut --> Expected ut
274 Node 2 GET -> Key mattis
275 Client 1 Node 2 - GET mattis -> Result NULL --> Expected ut
276 Node 3 GET -> Key mattis
277 Client 1 Node 3 - GET mattis -> Result NULL --> Expected ut
278
279 Node 1 -> Key ligula, Value eget
280 Client 1 Node 1 - PUT ligula, eget
281 Client 1 Delay: 0.7909792405802527 seconds
282 Node 1 GET -> Key elementum
283 Client 0 Node 1 - GET elementum -> Result orci --> Expected orci
284 Node 2 GET -> Key elementum
285 Client 0 Node 2 - GET elementum -> Result NULL --> Expected orci
286 Node 3 GET -> Key elementum
287 Client 0 Node 3 - GET elementum -> Result NULL --> Expected orci
288
289 Node 1 -> Key et, Value at
290 Client 0 Node 1 - PUT et, at
291 Client 0 Delay: 0.6203376180702643 seconds
292 Node 2 Updated! -> Key nulla, Value Nullam
293 Node 3 Updated! -> Key nulla, Value Nullam
294 Node 1 GET -> Key ligula
295 Client 1 Node 1 - GET ligula -> Result eget --> Expected eget
296 Node 2 GET -> Key ligula
297 Client 1 Node 2 - GET ligula -> Result NULL --> Expected eget
298 Node 3 GET -> Key ligula
299 Client 1 Node 3 - GET ligula -> Result NULL --> Expected eget
300
301 Node 1 -> Key erat, Value mi
302 Client 1 Node 1 - PUT erat, mi
303 Client 1 Delay: 0.5668552675844488 seconds
304 Node 1 GET -> Key et
305 Client 0 Node 1 - GET et -> Result at --> Expected at
306 Node 2 GET -> Key et
307 Client 0 Node 2 - GET et -> Result NULL --> Expected at
308 Node 3 GET -> Key et
309 Client 0 Node 3 - GET et -> Result NULL --> Expected at
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310
311 Node 1 -> Key gravida, Value Etiam
312 Client 0 Node 1 - PUT gravida, Etiam
313 Client 0 Delay: 0.5426882908519466 seconds
314 Node 1 GET -> Key erat
315 Client 1 Node 1 - GET erat -> Result mi --> Expected mi
316 Node 2 GET -> Key erat
317 Client 1 Node 2 - GET erat -> Result NULL --> Expected mi
318 Node 3 GET -> Key erat
319 Client 1 Node 3 - GET erat -> Result NULL --> Expected mi
320
321 Node 1 -> Key blandit, Value risus
322 Client 1 Node 1 - PUT blandit, risus
323 Client 1 Delay: 1.11608203245741 seconds
324 Node 1 GET -> Key gravida
325 Client 0 Node 1 - GET gravida -> Result Etiam --> Expected Etiam
326 Node 2 GET -> Key gravida
327 Client 0 Node 2 - GET gravida -> Result NULL --> Expected Etiam
328 Node 3 GET -> Key gravida
329 Client 0 Node 3 - GET gravida -> Result NULL --> Expected Etiam
330
331 Node 1 -> Key lacus, Value nonummy
332 Client 0 Node 1 - PUT lacus, nonummy
333 Client 0 Delay: 0.696445465521116 seconds
334 Node 2 Updated! -> Key cursus, Value vitae
335 Node 3 Updated! -> Key cursus, Value vitae
336 Node 1 GET -> Key lacus
337 Client 0 Node 1 - GET lacus -> Result nonummy --> Expected nonummy
338 Node 2 GET -> Key lacus
339 Client 0 Node 2 - GET lacus -> Result NULL --> Expected nonummy
340 Node 3 GET -> Key lacus
341 Client 0 Node 3 - GET lacus -> Result NULL --> Expected nonummy
342
343 Node 1 -> Key malesuada, Value Aliquam
344 Client 0 Node 1 - PUT malesuada, Aliquam
345 Client 0 Delay: 1.1299342144106612 seconds
346 Node 2 Updated! -> Key mauris, Value Vestibulum
347 Node 3 Updated! -> Key mauris, Value Vestibulum
348 Node 1 GET -> Key blandit
349 Client 1 Node 1 - GET blandit -> Result risus --> Expected risus
350 Node 2 GET -> Key blandit
351 Client 1 Node 2 - GET blandit -> Result NULL --> Expected risus
352 Node 3 GET -> Key blandit
353 Client 1 Node 3 - GET blandit -> Result NULL --> Expected risus
354
355 Node 1 -> Key varius, Value Morbi
356 Client 1 Node 1 - PUT varius, Morbi
357 Client 1 Delay: 1.1696656501954084 seconds
358 Node 2 Updated! -> Key Nunc, Value Donec
359 Node 3 Updated! -> Key Nunc, Value Donec
360 Node 1 GET -> Key malesuada
361 Client 0 Node 1 - GET malesuada -> Result Aliquam --> Expected Aliquam
362 Node 2 GET -> Key malesuada
363 Client 0 Node 2 - GET malesuada -> Result NULL --> Expected Aliquam
364 Node 3 GET -> Key malesuada
365 Client 0 Node 3 - GET malesuada -> Result NULL --> Expected Aliquam
366
367 Node 1 -> Key In, Value lorem
368 Client 0 Node 1 - PUT In, lorem
369 Client 0 Delay: 0.7626697103723468 seconds
370 Node 1 GET -> Key varius
371 Client 1 Node 1 - GET varius -> Result Morbi --> Expected Morbi
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372 Node 2 GET -> Key varius
373 Client 1 Node 2 - GET varius -> Result NULL --> Expected Morbi
374 Node 3 GET -> Key varius
375 Client 1 Node 3 - GET varius -> Result NULL --> Expected Morbi
376
377 Node 1 -> Key Proin, Value a
378 Client 1 Node 1 - PUT Proin, a
379 Client 1 Delay: 0.8193770536985009 seconds
380 Node 2 Updated! -> Key mattis, Value ut
381 Node 3 Updated! -> Key mattis, Value ut
382 Node 1 GET -> Key In
383 Client 0 Node 1 - GET In -> Result lorem --> Expected lorem
384 Node 2 GET -> Key In
385 Client 0 Node 2 - GET In -> Result NULL --> Expected lorem
386 Node 3 GET -> Key In
387 Client 0 Node 3 - GET In -> Result NULL --> Expected lorem
388
389 Node 1 -> Key Duis, Value euismod
390 Client 0 Node 1 - PUT Duis, euismod
391 Client 0 Delay: 1.0471030642245835 seconds
392 Node 2 Updated! -> Key elementum, Value orci
393 Node 3 Updated! -> Key elementum, Value orci
394 Node 1 GET -> Key Proin
395 Client 1 Node 1 - GET Proin -> Result a --> Expected a
396 Node 2 GET -> Key Proin
397 Client 1 Node 2 - GET Proin -> Result NULL --> Expected a
398 Node 3 GET -> Key Proin
399 Client 1 Node 3 - GET Proin -> Result NULL --> Expected a
400
401 Node 1 -> Key orci, Value eros
402 Client 1 Node 1 - PUT orci, eros
403 Client 1 Delay: 0.5141110110119033 seconds
404 Node 1 GET -> Key orci
405 Client 1 Node 1 - GET orci -> Result eros --> Expected eros
406 Node 2 GET -> Key orci
407 Client 1 Node 2 - GET orci -> Result NULL --> Expected eros
408 Node 3 GET -> Key orci
409 Client 1 Node 3 - GET orci -> Result NULL --> Expected eros
410
411 Node 1 -> Key a, Value at
412 Client 1 Node 1 - PUT a, at
413 Client 1 Delay: 1.124115351513748 seconds
414 Node 1 GET -> Key Duis
415 Client 0 Node 1 - GET Duis -> Result euismod --> Expected euismod
416 Node 2 GET -> Key Duis
417 Client 0 Node 2 - GET Duis -> Result NULL --> Expected euismod
418 Node 3 GET -> Key Duis
419 Client 0 Node 3 - GET Duis -> Result NULL --> Expected euismod
420
421 Node 1 -> Key Aenean, Value Fusce
422 Client 0 Node 1 - PUT Aenean, Fusce
423 Client 0 Delay: 0.7757454901970311 seconds
424 Node 2 Updated! -> Key ligula, Value eget
425 Node 3 Updated! -> Key ligula, Value eget
426 Node 2 Updated! -> Key et, Value at
427 Node 3 Updated! -> Key et, Value at
428 Node 1 GET -> Key Aenean
429 Client 0 Node 1 - GET Aenean -> Result Fusce --> Expected Fusce
430 Node 2 GET -> Key Aenean
431 Client 0 Node 2 - GET Aenean -> Result NULL --> Expected Fusce
432 Node 3 GET -> Key Aenean
433 Client 0 Node 3 - GET Aenean -> Result NULL --> Expected Fusce
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434
435 Node 1 -> Key ipsum, Value in
436 Client 0 Node 1 - PUT ipsum, in
437 Client 0 Delay: 0.8061014635968192 seconds
438 Node 2 Updated! -> Key erat, Value mi
439 Node 3 Updated! -> Key erat, Value mi
440 Node 1 GET -> Key a
441 Client 1 Node 1 - GET a -> Result at --> Expected at
442 Node 2 GET -> Key a
443 Client 1 Node 2 - GET a -> Result NULL --> Expected at
444 Node 3 GET -> Key a
445 Client 1 Node 3 - GET a -> Result NULL --> Expected at
446
447 Node 1 -> Key magnis, Value aliquet
448 Client 1 Node 1 - PUT magnis, aliquet
449 Client 1 Delay: 0.8053209614654686 seconds
450 Node 1 GET -> Key ipsum
451 Client 0 Node 1 - GET ipsum -> Result in --> Expected in
452 Node 2 GET -> Key ipsum
453 Client 0 Node 2 - GET ipsum -> Result NULL --> Expected in
454 Node 3 GET -> Key ipsum
455 Client 0 Node 3 - GET ipsum -> Result NULL --> Expected in
456
457 Node 1 -> Key Vestibulum, Value ipsum
458 Client 0 Node 1 - PUT Vestibulum, ipsum
459 Client 0 Delay: 0.5316907854151474 seconds
460 Node 1 GET -> Key magnis
461 Client 1 Node 1 - GET magnis -> Result aliquet --> Expected aliquet
462 Node 2 GET -> Key magnis
463 Client 1 Node 2 - GET magnis -> Result NULL --> Expected aliquet
464 Node 3 GET -> Key magnis
465 Client 1 Node 3 - GET magnis -> Result NULL --> Expected aliquet
466
467 Node 1 -> Key Quisque, Value vitae
468 Client 1 Node 1 - PUT Quisque, vitae
469 Client 1 Delay: 0.7070635729173079 seconds
470 Node 2 Updated! -> Key gravida, Value Etiam
471 Node 3 Updated! -> Key gravida, Value Etiam
472 Node 1 GET -> Key Vestibulum
473 Client 0 Node 1 - GET Vestibulum -> Result ipsum --> Expected ipsum
474 Node 2 GET -> Key Vestibulum
475 Client 0 Node 2 - GET Vestibulum -> Result NULL --> Expected ipsum
476 Node 3 GET -> Key Vestibulum
477 Client 0 Node 3 - GET Vestibulum -> Result NULL --> Expected ipsum
478
479 Node 1 -> Key Fusce, Value Nunc
480 Client 0 Node 1 - PUT Fusce, Nunc
481 Client 0 Delay: 0.8973325641783695 seconds
482 Node 1 GET -> Key Quisque
483 Client 1 Node 1 - GET Quisque -> Result vitae --> Expected vitae
484 Node 2 GET -> Key Quisque
485 Client 1 Node 2 - GET Quisque -> Result NULL --> Expected vitae
486 Node 3 GET -> Key Quisque
487 Client 1 Node 3 - GET Quisque -> Result NULL --> Expected vitae
488
489 Node 1 -> Key interdum, Value elementum
490 Client 1 Node 1 - PUT interdum, elementum
491 Client 1 Delay: 1.0259763257919814 seconds
492 Node 2 Updated! -> Key blandit, Value risus
493 Node 3 Updated! -> Key blandit, Value risus
494 Node 1 GET -> Key Fusce
495 Client 0 Node 1 - GET Fusce -> Result Nunc --> Expected Nunc
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496 Node 2 GET -> Key Fusce
497 Client 0 Node 2 - GET Fusce -> Result NULL --> Expected Nunc
498 Node 3 GET -> Key Fusce
499 Client 0 Node 3 - GET Fusce -> Result NULL --> Expected Nunc
500
501 Node 1 -> Key Integer, Value at
502 Client 0 Node 1 - PUT Integer, at
503 Client 0 Delay: 1.0288248340804835 seconds
504 Node 2 Updated! -> Key lacus, Value nonummy
505 Node 3 Updated! -> Key lacus, Value nonummy
506 Node 1 GET -> Key interdum
507 Client 1 Node 1 - GET interdum -> Result elementum --> Expected elementum
508 Node 2 GET -> Key interdum
509 Client 1 Node 2 - GET interdum -> Result pellentesque --> Expected elementum
510 Node 3 GET -> Key interdum
511 Client 1 Node 3 - GET interdum -> Result pellentesque --> Expected elementum
512
513 Node 1 -> Key magna, Value magna
514 Client 1 Node 1 - PUT magna, magna
515 Client 1 Delay: 0.6586110349055326 seconds
516 Node 2 Updated! -> Key malesuada, Value Aliquam
517 Node 3 Updated! -> Key malesuada, Value Aliquam
518 Node 1 GET -> Key Integer
519 Client 0 Node 1 - GET Integer -> Result at --> Expected at
520 Node 2 GET -> Key Integer
521 Client 0 Node 2 - GET Integer -> Result NULL --> Expected at
522 Node 3 GET -> Key Integer
523 Client 0 Node 3 - GET Integer -> Result NULL --> Expected at
524
525 Node 1 -> Key Aliquam, Value sem
526 Client 0 Node 1 - PUT Aliquam, sem
527 Client 0 Delay: 1.0766118083176068 seconds
528 Node 1 GET -> Key magna
529 Client 1 Node 1 - GET magna -> Result magna --> Expected magna
530 Node 2 GET -> Key magna
531 Client 1 Node 2 - GET magna -> Result magna --> Expected magna
532 Node 3 GET -> Key magna
533 Client 1 Node 3 - GET magna -> Result magna --> Expected magna
534
535 Node 1 -> Key lorem, Value vel
536 Client 1 Node 1 - PUT lorem, vel
537 Client 1 Delay: 0.576234000377277 seconds
538 Node 2 Updated! -> Key varius, Value Morbi
539 Node 3 Updated! -> Key varius, Value Morbi
540 Node 1 GET -> Key lorem
541 Client 1 Node 1 - GET lorem -> Result vel --> Expected vel
542 Node 2 GET -> Key lorem
543 Client 1 Node 2 - GET lorem -> Result NULL --> Expected vel
544 Node 3 GET -> Key lorem
545 Client 1 Node 3 - GET lorem -> Result NULL --> Expected vel
546
547 Node 1 -> Key Morbi, Value turpis
548 Client 1 Node 1 - PUT Morbi, turpis
549 Client 1 Delay: 1.092196543981312 seconds
550 Node 1 GET -> Key Aliquam
551 Client 0 Node 1 - GET Aliquam -> Result sem --> Expected sem
552 Node 2 GET -> Key Aliquam
553 Client 0 Node 2 - GET Aliquam -> Result NULL --> Expected sem
554 Node 3 GET -> Key Aliquam
555 Client 0 Node 3 - GET Aliquam -> Result NULL --> Expected sem
556
557 Node 1 -> Key vel, Value sit
```

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```
558 Client 0 Node 1 - PUT vel, sit
559 Client 0 Delay: 1.1005658140766048 seconds
560 Node 2 Updated! -> Key In, Value lorem
561 Node 3 Updated! -> Key In, Value lorem
562 Node 1 GET -> Key Morbi
563 Client 1 Node 1 - GET Morbi -> Result turpis --> Expected turpis
564 Node 2 GET -> Key Morbi
565 Client 1 Node 2 - GET Morbi -> Result NULL --> Expected turpis
566 Node 3 GET -> Key Morbi
567 Client 1 Node 3 - GET Morbi -> Result NULL --> Expected turpis
568
569 Node 1 -> Key luctus, Value sem
570 Client 1 Node 1 - PUT luctus, sem
571 Client 1 Delay: 0.7380493844063889 seconds
572 Node 2 Updated! -> Key Proin, Value a
573 Node 3 Updated! -> Key Proin, Value a
574 Node 1 GET -> Key vel
575 Client 0 Node 1 - GET vel -> Result sit --> Expected sit
576 Node 2 GET -> Key vel
577 Client 0 Node 2 - GET vel -> Result NULL --> Expected sit
578 Node 3 GET -> Key vel
579 Client 0 Node 3 - GET vel -> Result NULL --> Expected sit
580
581 Node 1 -> Key lectus, Value semper
582 Client 0 Node 1 - PUT lectus, semper
583 Client 0 Delay: 0.8882860461503341 seconds
584 Node 2 Updated! -> Key Duis, Value euismod
585 Node 3 Updated! -> Key Duis, Value euismod
586 Node 1 GET -> Key lectus
587 Client 1 Node 1 - GET lectus -> Result sem --> Expected sem
588 Node 2 GET -> Key lectus
589 Client 1 Node 2 - GET lectus -> Result NULL --> Expected sem
590 Node 3 GET -> Key lectus
591 Client 1 Node 3 - GET lectus -> Result NULL --> Expected sem
592
593 Node 1 -> Key sit, Value augue
594 Client 1 Node 1 - PUT sit, augue
595 Client 1 Delay: 1.0138014483941797 seconds
596 Node 2 Updated! -> Key orci, Value eros
597 Node 3 Updated! -> Key orci, Value eros
598 Node 1 GET -> Key lectus
599 Client 0 Node 1 - GET lectus -> Result semper --> Expected semper
600 Node 2 GET -> Key lectus
601 Client 0 Node 2 - GET lectus -> Result NULL --> Expected semper
602 Node 3 GET -> Key lectus
603 Client 0 Node 3 - GET lectus -> Result NULL --> Expected semper
604
605 Node 1 -> Key dignissim, Value eget
606 Client 0 Node 1 - PUT dignissim, eget
607 Client 0 Delay: 0.9641798327361013 seconds
608 Node 2 Updated! -> Key a, Value at
609 Node 3 Updated! -> Key a, Value at
610 Node 1 GET -> Key sit
611 Client 1 Node 1 - GET sit -> Result augue --> Expected augue
612 Node 2 GET -> Key sit
613 Client 1 Node 2 - GET sit -> Result NULL --> Expected augue
614 Node 3 GET -> Key sit
615 Client 1 Node 3 - GET sit -> Result NULL --> Expected augue
616
617 Node 1 -> Key et, Value dolor
618 Client 1 Node 1 - PUT et, dolor
619 Client 1 Delay: 0.6064391537219584 seconds
```

File - driver

```
620 Node 2 Updated! -> Key Aenean, Value Fusce
621 Node 3 Updated! -> Key Aenean, Value Fusce
622 Node 1 GET -> Key dignissim
623 Client 0 Node 1 - GET dignissim -> Result eget --> Expected eget
624 Node 2 GET -> Key dignissim
625 Client 0 Node 2 - GET dignissim -> Result NULL --> Expected eget
626 Node 3 GET -> Key dignissim
627 Client 0 Node 3 - GET dignissim -> Result NULL --> Expected eget
628
629 Node 1 -> Key Donec, Value ipsum
630 Client 0 Node 1 - PUT Donec, ipsum
631 Client 0 Delay: 0.9262878992357454 seconds
632 Node 1 GET -> Key et
633 Client 1 Node 1 - GET et -> Result dolor --> Expected dolor
634 Node 2 GET -> Key et
635 Client 1 Node 2 - GET et -> Result at --> Expected dolor
636 Node 3 GET -> Key et
637 Client 1 Node 3 - GET et -> Result at --> Expected dolor
638
639 Node 1 -> Key Donec, Value fringilla
640 Client 1 Node 1 - PUT Donec, fringilla
641 Client 1 Delay: 0.847737041518069 seconds
642 Node 2 Updated! -> Key ipsum, Value in
643 Node 3 Updated! -> Key ipsum, Value in
644 Node 2 Updated! -> Key magnis, Value aliquet
645 Node 3 Updated! -> Key magnis, Value aliquet
646 Node 1 GET -> Key Donec
647 Client 0 Node 1 - GET Donec -> Result fringilla --> Expected ipsum
648 Node 2 GET -> Key Donec
649 Client 0 Node 2 - GET Donec -> Result NULL --> Expected ipsum
650 Node 3 GET -> Key Donec
651 Client 0 Node 3 - GET Donec -> Result NULL --> Expected ipsum
652
653 Node 1 -> Key nascetur, Value convallis
654 Client 0 Node 1 - PUT nascetur, convallis
655 Client 0 Delay: 1.0500767083319014 seconds
656 Node 1 GET -> Key Donec
657 Client 1 Node 1 - GET Donec -> Result fringilla --> Expected fringilla
658 Node 2 GET -> Key Donec
659 Client 1 Node 2 - GET Donec -> Result NULL --> Expected fringilla
660 Node 3 GET -> Key Donec
661 Client 1 Node 3 - GET Donec -> Result NULL --> Expected fringilla
662
663 Node 1 -> Key consectetur, Value nisi
664 Client 1 Node 1 - PUT consectetur, nisi
665 Client 1 Delay: 0.8659397237670667 seconds
666 Node 2 Updated! -> Key Vestibulum, Value ipsum
667 Node 3 Updated! -> Key Vestibulum, Value ipsum
668 Node 2 Updated! -> Key Quisque, Value vitae
669 Node 3 Updated! -> Key Quisque, Value vitae
670 Node 1 GET -> Key consectetur
671 Client 1 Node 1 - GET consectetur -> Result nisi --> Expected nisi
672 Node 2 GET -> Key consectetur
673 Client 1 Node 2 - GET consectetur -> Result NULL --> Expected nisi
674 Node 3 GET -> Key consectetur
675 Client 1 Node 3 - GET consectetur -> Result NULL --> Expected nisi
676
677 Node 1 -> Key semper, Value Donec
678 Client 1 Node 1 - PUT semper, Donec
679 Client 1 Delay: 0.5288712305362745 seconds
680 Node 1 GET -> Key nascetur
681 Client 0 Node 1 - GET nascetur -> Result convallis --> Expected convallis
```

File - driver

```
682 Node 2 GET -> Key nascetur
683 Client 0 Node 2 - GET nascetur -> Result NULL --> Expected convallis
684 Node 3 GET -> Key nascetur
685 Client 0 Node 3 - GET nascetur -> Result NULL --> Expected convallis
686
687 Node 1 -> Key mus, Value tristique
688 Client 0 Node 1 - PUT mus, tristique
689 Client 0 Delay: 1.0543141688347941 seconds
690 Node 2 Updated! -> Key Fusce, Value Nunc
691 Node 3 Updated! -> Key Fusce, Value Nunc
692 Node 1 GET -> Key semper
693 Client 1 Node 1 - GET semper -> Result Donec --> Expected Donec
694 Node 2 GET -> Key semper
695 Client 1 Node 2 - GET semper -> Result NULL --> Expected Donec
696 Node 3 GET -> Key semper
697 Client 1 Node 3 - GET semper -> Result NULL --> Expected Donec
698
699 Node 1 -> Key vel, Value non
700 Client 1 Node 1 - PUT vel, non
701 Client 1 Delay: 0.689016659852666 seconds
702 Node 2 Updated! -> Key interdum, Value elementum
703 Node 3 Updated! -> Key interdum, Value elementum
704 Node 1 GET -> Key mus
705 Client 0 Node 1 - GET mus -> Result tristique --> Expected tristique
706 Node 2 GET -> Key mus
707 Client 0 Node 2 - GET mus -> Result NULL --> Expected tristique
708 Node 3 GET -> Key mus
709 Client 0 Node 3 - GET mus -> Result NULL --> Expected tristique
710
711 Node 1 -> Key sed, Value vestibulum
712 Client 0 Node 1 - PUT sed, vestibulum
713 Client 0 Delay: 0.7662610759056125 seconds
714 Node 2 Updated! -> Key Integer, Value at
715 Node 3 Updated! -> Key Integer, Value at
716 Node 1 GET -> Key vel
717 Client 1 Node 1 - GET vel -> Result non --> Expected non
718 Node 2 GET -> Key vel
719 Client 1 Node 2 - GET vel -> Result NULL --> Expected non
720 Node 3 GET -> Key vel
721 Client 1 Node 3 - GET vel -> Result NULL --> Expected non
722
723 Node 1 -> Key nec, Value ac
724 Client 1 Node 1 - PUT nec, ac
725 Client 1 Delay: 0.598655072508946 seconds
726 Node 1 GET -> Key nec
727 Client 1 Node 1 - GET nec -> Result ac --> Expected ac
728 Node 2 GET -> Key nec
729 Client 1 Node 2 - GET nec -> Result accumsan --> Expected ac
730 Node 3 GET -> Key nec
731 Client 1 Node 3 - GET nec -> Result accumsan --> Expected ac
732
733 Node 1 -> Key Pellentesque, Value nec
734 Client 1 Node 1 - PUT Pellentesque, nec
735 Client 1 Delay: 1.031855588496291 seconds
736 Node 1 GET -> Key sed
737 Client 0 Node 1 - GET sed -> Result vestibulum --> Expected vestibulum
738 Node 2 GET -> Key sed
739 Client 0 Node 2 - GET sed -> Result nec --> Expected vestibulum
740 Node 3 GET -> Key sed
741 Client 0 Node 3 - GET sed -> Result nec --> Expected vestibulum
742
743 Node 1 -> Key massa, Value mattis
```

File - driver

```
744 Client 0 Node 1 - PUT massa, mattis
745 Client 0 Delay: 1.0373927328016586 seconds
746 Node 2 Updated! -> Key magna, Value magna
747 Node 3 Updated! -> Key magna, Value magna
748 Node 2 Updated! -> Key Aliquam, Value sem
749 Node 3 Updated! -> Key Aliquam, Value sem
750 Node 2 Updated! -> Key lorem, Value vel
751 Node 3 Updated! -> Key lorem, Value vel
752 Node 1 GET -> Key Pellentesque
753 Client 1 Node 1 - GET Pellentesque -> Result nec --> Expected nec
754 Node 2 GET -> Key Pellentesque
755 Client 1 Node 2 - GET Pellentesque -> Result NULL --> Expected nec
756 Node 3 GET -> Key Pellentesque
757 Client 1 Node 3 - GET Pellentesque -> Result NULL --> Expected nec
758
759 Node 1 -> Key scelerisque, Value augue
760 Client 1 Node 1 - PUT scelerisque, augue
761 Client 1 Delay: 1.030503254912731 seconds
762 Node 1 GET -> Key massa
763 Client 0 Node 1 - GET massa -> Result mattis --> Expected mattis
764 Node 2 GET -> Key massa
765 Client 0 Node 2 - GET massa -> Result NULL --> Expected mattis
766 Node 3 GET -> Key massa
767 Client 0 Node 3 - GET massa -> Result NULL --> Expected mattis
768
769 Node 1 -> Key dictum, Value eu
770 Client 0 Node 1 - PUT dictum, eu
771 Client 0 Delay: 0.6685722905789027 seconds
772 Node 2 Updated! -> Key Morbi, Value turpis
773 Node 3 Updated! -> Key Morbi, Value turpis
774 Node 1 GET -> Key dictum
775 Client 0 Node 1 - GET dictum -> Result eu --> Expected eu
776 Node 2 GET -> Key dictum
777 Client 0 Node 2 - GET dictum -> Result NULL --> Expected eu
778 Node 3 GET -> Key dictum
779 Client 0 Node 3 - GET dictum -> Result NULL --> Expected eu
780
781 Node 1 -> Key est, Value at
782 Client 0 Node 1 - PUT est, at
783 Client 0 Delay: 1.1029900825581498 seconds
784 Node 2 Updated! -> Key vel, Value sit
785 Node 3 Updated! -> Key vel, Value sit
786 Node 1 GET -> Key scelerisque
787 Client 1 Node 1 - GET scelerisque -> Result augue --> Expected augue
788 Node 2 GET -> Key scelerisque
789 Client 1 Node 2 - GET scelerisque -> Result NULL --> Expected augue
790 Node 3 GET -> Key scelerisque
791 Client 1 Node 3 - GET scelerisque -> Result NULL --> Expected augue
792
793 Node 1 -> Key fringilla, Value Quisque
794 Client 1 Node 1 - PUT fringilla, Quisque
795 Client 1 Delay: 0.6979535501835062 seconds
796 Node 2 Updated! -> Key luctus, Value sem
797 Node 3 Updated! -> Key luctus, Value sem
798 Node 1 GET -> Key fringilla
799 Client 1 Node 1 - GET fringilla -> Result Quisque --> Expected Quisque
800 Node 2 GET -> Key fringilla
801 Client 1 Node 2 - GET fringilla -> Result NULL --> Expected Quisque
802 Node 3 GET -> Key fringilla
803 Client 1 Node 3 - GET fringilla -> Result NULL --> Expected Quisque
804
805 Node 1 -> Key metus, Value Morbi
```

File - driver

```
806 Client 1 Node 1 - PUT metus, Morbi
807 Client 1 Delay: 1.175642913432224 seconds
808 Node 1 GET -> Key est
809 Client 0 Node 1 - GET est -> Result at --> Expected at
810 Node 2 GET -> Key est
811 Client 0 Node 2 - GET est -> Result NULL --> Expected at
812 Node 3 GET -> Key est
813 Client 0 Node 3 - GET est -> Result NULL --> Expected at
814
815 Node 1 -> Key ac, Value id
816 Client 0 Node 1 - PUT ac, id
817 Client 0 Delay: 0.8099076053514725 seconds
818 Node 2 Updated! -> Key lectus, Value semper
819 Node 3 Updated! -> Key lectus, Value semper
820 Node 1 GET -> Key ac
821 Client 0 Node 1 - GET ac -> Result id --> Expected id
822 Node 2 GET -> Key ac
823 Client 0 Node 2 - GET ac -> Result NULL --> Expected id
824 Node 3 GET -> Key ac
825 Client 0 Node 3 - GET ac -> Result NULL --> Expected id
826
827 Node 1 -> Key Maecenas, Value Suspendisse
828 Client 0 Node 1 - PUT Maecenas, Suspendisse
829 Client 0 Delay: 0.6686662836849134 seconds
830 Node 1 GET -> Key metus
831 Client 1 Node 1 - GET metus -> Result Morbi --> Expected Morbi
832 Node 2 GET -> Key metus
833 Client 1 Node 2 - GET metus -> Result NULL --> Expected Morbi
834 Node 2 Updated! -> Key sit, Value augue
835 Node 3 GET -> Key metus
836 Client 1 Node 3 - GET metus -> Result NULL --> Expected Morbi
837
838 Node 3 Updated! -> Key sit, Value augue
839 Node 1 -> Key ut, Value nonummy
840 Client 1 Node 1 - PUT ut, nonummy
841 Client 1 Delay: 0.5169751398819499 seconds
842 Node 1 GET -> Key MaecenasNode 2 Updated! -> Key dignissim, Value eget
843
844 Client 0 Node 1 - GET Maecenas -> Result Suspendisse --> Expected Suspendisse
845 Node 2 GET -> Key Maecenas
846 Node 3 Updated! -> Key dignissim, Value eget
847 Client 0 Node 2 - GET Maecenas -> Result NULL --> Expected Suspendisse
848 Node 3 GET -> Key Maecenas
849 Client 0 Node 3 - GET Maecenas -> Result NULL --> Expected Suspendisse
850
851 Node 1 -> Key vitae, Value mauris
852 Client 0 Node 1 - PUT vitae, mauris
853 Client 0 Delay: 0.7835043628414399 seconds
854 Node 1 GET -> Key ut
855 Client 1 Node 1 - GET ut -> Result nonummy --> Expected nonummy
856 Node 2 GET -> Key ut
857 Client 1 Node 2 - GET ut -> Result NULL --> Expected nonummy
858 Node 3 GET -> Key ut
859 Client 1 Node 3 - GET ut -> Result NULL --> Expected nonummy
860
861 Node 1 -> Key augue, Value magna
862 Client 1 Node 1 - PUT augue, magna
863 Client 1 Delay: 0.6612210933226397 seconds
864 Node 1 GET -> Key augue
865 Client 1 Node 1 - GET augue -> Result magna --> Expected magna
866 Node 2 GET -> Key augue
867 Client 1 Node 2 - GET augue -> Result NULL --> Expected magna
```

File - driver

```
868 Node 3 GET -> Key augue
869 Client 1 Node 3 - GET augue -> Result NULL --> Expected magna
870
871 Node 1 -> Key dictum, Value sem
872 Client 1 Node 1 - PUT dictum, sem
873 Client 1 Delay: 0.8010395601469963 seconds
874 Node 1 GET -> Key vitae
875 Client 0 Node 1 - GET vitae -> Result mauris --> Expected mauris
876 Node 2 GET -> Key vitae
877 Client 0 Node 2 - GET vitae -> Result NULL --> Expected mauris
878 Node 3 GET -> Key vitae
879 Client 0 Node 3 - GET vitae -> Result NULL --> Expected mauris
880
881 Node 1 -> Key leo, Value in
882 Client 0 Node 1 - PUT leo, in
883 Client 0 Delay: 0.8151070409933788 seconds
884 Node 2 Updated! -> Key et, Value dolor
885 Node 3 Updated! -> Key et, Value dolor
886 Node 2 Updated! -> Key Donec, Value ipsum
887 Node 3 Updated! -> Key Donec, Value ipsum
888 Node 1 GET -> Key dictum
889 Client 1 Node 1 - GET dictum -> Result sem --> Expected sem
890 Node 2 GET -> Key dictum
891 Client 1 Node 2 - GET dictum -> Result NULL --> Expected sem
892 Node 3 GET -> Key dictum
893 Client 1 Node 3 - GET dictum -> Result NULL --> Expected sem
894
895 Node 1 -> Key eget, Value lectus
896 Client 1 Node 1 - PUT eget, lectus
897 Client 1 Delay: 0.8444704933079137 seconds
898 Node 1 GET -> Key leo
899 Client 0 Node 1 - GET leo -> Result in --> Expected in
900 Node 2 GET -> Key leo
901 Client 0 Node 2 - GET leo -> Result NULL --> Expected in
902 Node 3 GET -> Key leo
903 Client 0 Node 3 - GET leo -> Result NULL --> Expected in
904
905 Node 1 -> Key iaculis, Value pharetra
906 Client 0 Node 1 - PUT iaculis, pharetra
907 Client 0 Delay: 1.1305298703700877 seconds
908 Node 2 Updated! -> Key Donec, Value fringilla
909 Node 3 Updated! -> Key Donec, Value fringilla
910 Node 2 Updated! -> Key nascetur, Value convallis
911 Node 3 Updated! -> Key nascetur, Value convallis
912 Node 1 GET -> Key eget
913 Client 1 Node 1 - GET eget -> Result lectus --> Expected lectus
914 Node 2 GET -> Key eget
915 Client 1 Node 2 - GET eget -> Result NULL --> Expected lectus
916 Node 3 GET -> Key eget
917 Client 1 Node 3 - GET eget -> Result NULL --> Expected lectus
918
919 Node 1 -> Key molestie, Value lorem
920 Client 1 Node 1 - PUT molestie, lorem
921 Client 1 Delay: 0.780717621527778 seconds
922 Node 1 GET -> Key iaculis
923 Client 0 Node 1 - GET iaculis -> Result pharetra --> Expected pharetra
924 Node 2 GET -> Key iaculis
925 Client 0 Node 2 - GET iaculis -> Result NULL --> Expected pharetra
926 Node 3 GET -> Key iaculis
927 Client 0 Node 3 - GET iaculis -> Result NULL --> Expected pharetra
928
929 Node 1 -> Key ultrices, Value Suspendisse
```

File - driver

```
930 Client 0 Node 1 - PUT ultrices, Suspendisse
931 Client 0 Delay: 0.6211867162988305 seconds
932 Node 2 Updated! -> Key consectetur, Value nisi
933 Node 3 Updated! -> Key consectetur, Value nisi
934 Node 1 GET -> Key molestie
935 Client 1 Node 1 - GET molestie -> Result lorem --> Expected lorem
936 Node 2 GET -> Key molestie
937 Client 1 Node 2 - GET molestie -> Result NULL --> Expected lorem
938 Node 3 GET -> Key molestie
939 Client 1 Node 3 - GET molestie -> Result NULL --> Expected lorem
940
941 Node 1 -> Key Nam, Value sit
942 Client 1 Node 1 - PUT Nam, sit
943 Client 1 Delay: 0.850128482483652 seconds
944 Node 2 Updated! -> Key semper, Value Donec
945 Node 3 Updated! -> Key semper, Value Donec
946 Node 1 GET -> Key ultrices
947 Client 0 Node 1 - GET ultrices -> Result Suspendisse --> Expected Suspendisse
948 Node 2 GET -> Key ultrices
949 Client 0 Node 2 - GET ultrices -> Result NULL --> Expected Suspendisse
950 Node 3 GET -> Key ultrices
951 Client 0 Node 3 - GET ultrices -> Result NULL --> Expected Suspendisse
952
953 Node 1 -> Key tellus, Value est
954 Client 0 Node 1 - PUT tellus, est
955 Client 0 Delay: 0.9743708426926715 seconds
956 Node 1 GET -> Key Nam
957 Client 1 Node 1 - GET Nam -> Result sit --> Expected sit
958 Node 2 GET -> Key Nam
959 Client 1 Node 2 - GET Nam -> Result NULL --> Expected sit
960 Node 3 GET -> Key Nam
961 Client 1 Node 3 - GET Nam -> Result NULL --> Expected sit
962
963 Waiting for update queues to finish for 30 seconds
964 Node 2 Updated! -> Key mus, Value tristique
965 Node 3 Updated! -> Key mus, Value tristique
966 Node 1 GET -> Key tellus
967 Client 0 Node 1 - GET tellus -> Result est --> Expected est
968 Node 2 GET -> Key tellus
969 Client 0 Node 2 - GET tellus -> Result NULL --> Expected est
970 Node 3 GET -> Key tellus
971 Client 0 Node 3 - GET tellus -> Result NULL --> Expected est
972
973 Node 1 -> Key nibh, Value fermentum
974 Client 0 Node 1 - PUT nibh, fermentum
975 Client 0 Delay: 1.1444711467373052 seconds
976 Node 2 Updated! -> Key vel, Value non
977 Node 3 Updated! -> Key vel, Value non
978 Node 2 Updated! -> Key sed, Value vestibulum
979 Node 3 Updated! -> Key sed, Value vestibulum
980 Node 1 GET -> Key nibh
981 Client 0 Node 1 - GET nibh -> Result fermentum --> Expected fermentum
982 Node 2 GET -> Key nibh
983 Client 0 Node 2 - GET nibh -> Result NULL --> Expected fermentum
984 Node 3 GET -> Key nibh
985 Client 0 Node 3 - GET nibh -> Result NULL --> Expected fermentum
986
987 Node 1 -> Key eleifend, Value cursus
988 Client 0 Node 1 - PUT eleifend, cursus
989 Client 0 Delay: 1.1840391552892475 seconds
990 Node 2 Updated! -> Key nec, Value ac
991 Node 3 Updated! -> Key nec, Value ac
```

File - driver

```
992 Node 1 GET -> Key eleifend
993 Client 0 Node 1 - GET eleifend -> Result cursus --> Expected cursus
994 Node 2 GET -> Key eleifend
995 Client 0 Node 2 - GET eleifend -> Result NULL --> Expected cursus
996 Node 3 GET -> Key eleifend
997 Client 0 Node 3 - GET eleifend -> Result NULL --> Expected cursus
998
999 Node 1 -> Key Suspendisse, Value Sed
1000 Client 0 Node 1 - PUT Suspendisse, Sed
1001 Client 0 Delay: 0.9750924029302541 seconds
1002 Node 2 Updated! -> Key Pellentesque, Value nec
1003 Node 3 Updated! -> Key Pellentesque, Value nec
1004 Node 2 Updated! -> Key massa, Value mattis
1005 Node 3 Updated! -> Key massa, Value mattis
1006 Node 2 Updated! -> Key scelerisque, Value augue
1007 Node 3 Updated! -> Key scelerisque, Value augue
1008 Node 1 GET -> Key Suspendisse
1009 Client 0 Node 1 - GET Suspendisse -> Result Sed --> Expected Sed
1010 Node 2 GET -> Key Suspendisse
1011 Client 0 Node 2 - GET Suspendisse -> Result eu --> Expected Sed
1012 Node 3 GET -> Key Suspendisse
1013 Client 0 Node 3 - GET Suspendisse -> Result eu --> Expected Sed
1014
1015 Node 1 -> Key ut, Value amet
1016 Client 0 Node 1 - PUT ut, amet
1017 Client 0 Delay: 1.077588551812386 seconds
1018 Node 2 Updated! -> Key dictum, Value eu
1019 Node 3 Updated! -> Key dictum, Value eu
1020 Node 2 Updated! -> Key est, Value at
1021 Node 3 Updated! -> Key est, Value at
1022 Node 1 GET -> Key ut
1023 Client 0 Node 1 - GET ut -> Result amet --> Expected amet
1024 Node 2 GET -> Key ut
1025 Client 0 Node 2 - GET ut -> Result NULL --> Expected amet
1026 Node 3 GET -> Key ut
1027 Client 0 Node 3 - GET ut -> Result NULL --> Expected amet
1028
1029 Node 1 -> Key venenatis, Value orci
1030 Client 0 Node 1 - PUT venenatis, orci
1031 Client 0 Delay: 0.5871416472597207 seconds
1032 Node 2 Updated! -> Key fringilla, Value Quisque
1033 Node 3 Updated! -> Key fringilla, Value Quisque
1034 Node 1 GET -> Key venenatis
1035 Client 0 Node 1 - GET venenatis -> Result orci --> Expected orci
1036 Node 2 GET -> Key venenatis
1037 Client 0 Node 2 - GET venenatis -> Result NULL --> Expected orci
1038 Node 3 GET -> Key venenatis
1039 Client 0 Node 3 - GET venenatis -> Result NULL --> Expected orci
1040
1041 Node 1 -> Key Nunc, Value ultricies
1042 Client 0 Node 1 - PUT Nunc, ultricies
1043 Client 0 Delay: 0.6112035471273568 seconds
1044 Node 1 GET -> Key Nunc
1045 Client 0 Node 1 - GET Nunc -> Result ultricies --> Expected ultricies
1046 Node 2 GET -> Key Nunc
1047 Client 0 Node 2 - GET Nunc -> Result Donec --> Expected ultricies
1048 Node 3 GET -> Key Nunc
1049 Client 0 Node 3 - GET Nunc -> Result Donec --> Expected ultricies
1050
1051 Waiting for update queues to finish for 30 seconds
1052 Node 2 Updated! -> Key metus, Value Morbi
1053 Node 3 Updated! -> Key metus, Value Morbi
```

File - driver

```
1054 Node 2 Updated! -> Key ac, Value id
1055 Node 3 Updated! -> Key ac, Value id
1056 Node 2 Updated! -> Key Maecenas, Value Suspendisse
1057 Node 3 Updated! -> Key Maecenas, Value Suspendisse
1058 Node 2 Updated! -> Key ut, Value nonummy
1059 Node 3 Updated! -> Key ut, Value nonummy
1060 Node 2 Updated! -> Key vitae, Value mauris
1061 Node 3 Updated! -> Key vitae, Value mauris
1062 Node 2 Updated! -> Key augue, Value magna
1063 Node 3 Updated! -> Key augue, Value magna
1064 Node 2 Updated! -> Key dictum, Value sem
1065 Node 3 Updated! -> Key dictum, Value sem
1066 Node 2 Updated! -> Key leo, Value in
1067 Node 3 Updated! -> Key leo, Value in
1068 Node 2 Updated! -> Key eget, Value lectus
1069 Node 3 Updated! -> Key eget, Value lectus
1070 Node 2 Updated! -> Key iaculis, Value pharetra
1071 Node 3 Updated! -> Key iaculis, Value pharetra
1072 Node 2 Updated! -> Key molestie, Value lorem
1073 Node 3 Updated! -> Key molestie, Value lorem
1074 Node 2 Updated! -> Key ultrices, Value Suspendisse
1075 Node 3 Updated! -> Key ultrices, Value Suspendisse
1076 Node 2 Updated! -> Key Nam, Value sit
1077 Node 3 Updated! -> Key Nam, Value sit
1078 Node 2 Updated! -> Key tellus, Value est
1079 Node 3 Updated! -> Key tellus, Value est
1080 Node 2 Updated! -> Key nibh, Value fermentum
1081 Node 3 Updated! -> Key nibh, Value fermentum
1082 Node 2 Updated! -> Key eleifend, Value cursus
1083 Node 3 Updated! -> Key eleifend, Value cursus
1084 Node 2 Updated! -> Key Suspendisse, Value Sed
1085 Node 3 Updated! -> Key Suspendisse, Value Sed
1086 Node 2 Updated! -> Key ut, Value amet
1087 Node 3 Updated! -> Key ut, Value amet
1088 Node 2 Updated! -> Key venenatis, Value orci
1089 Node 3 Updated! -> Key venenatis, Value orci
1090 Node 2 Updated! -> Key Nunc, Value ultricies
1091 Node 3 Updated! -> Key Nunc, Value ultricies
1092 Node 1 Remove! -> Key lobortis
1093 Client 1 Node 1 - REMOVE lobortis -> Result vulputate
1094 Client 1 Delay: 0.8187739823066705 seconds
1095 Node 2 Updated Remove! -> Key lobortis
1096 Node 3 Updated Remove! -> Key lobortis
1097 Node 1 GET -> Key lobortis
1098 Client 1 Node 1 - GET lobortis -> Result NULL --> Expected NULL
1099 Node 2 GET -> Key lobortis
1100 Client 1 Node 2 - GET lobortis -> Result NULL --> Expected NULL
1101 Node 3 GET -> Key lobortis
1102 Client 1 Node 3 - GET lobortis -> Result NULL --> Expected NULL
1103
1104 Node 1 Remove! -> Key nulla
1105 Client 1 Node 1 - REMOVE nulla -> Result Nullam
1106 Client 1 Delay: 0.7122842582301516 seconds
1107 Node 2 Updated Remove! -> Key nulla
1108 Node 3 Updated Remove! -> Key nulla
1109 Node 1 GET -> Key nulla
1110 Client 1 Node 1 - GET nulla -> Result NULL --> Expected NULL
1111 Node 2 GET -> Key nulla
1112 Client 1 Node 2 - GET nulla -> Result NULL --> Expected NULL
1113 Node 3 GET -> Key nulla
1114 Client 1 Node 3 - GET nulla -> Result NULL --> Expected NULL
1115
```

File - driver

```
1116 Node 1 Remove! -> Key Nulla
1117 Client 1 Node 1 - REMOVE Nulla -> Result ipsum
1118 Client 1 Delay: 0.5562062388660233 seconds
1119 Node 2 Updated Remove! -> Key Nulla
1120 Node 3 Updated Remove! -> Key Nulla
1121 Node 1 GET -> Key Nulla
1122 Client 1 Node 1 - GET Nulla -> Result NULL --> Expected NULL
1123 Node 2 GET -> Key Nulla
1124 Client 1 Node 2 - GET Nulla -> Result NULL --> Expected NULL
1125 Node 3 GET -> Key Nulla
1126 Client 1 Node 3 - GET Nulla -> Result NULL --> Expected NULL
1127
1128 Node 1 Remove! -> Key sed
1129 Client 1 Node 1 - REMOVE sed -> Result vestibulum
1130 Client 1 Delay: 1.0735456886349568 seconds
1131 Node 2 Updated Remove! -> Key sed
1132 Node 3 Updated Remove! -> Key sed
1133 Node 1 GET -> Key sed
1134 Client 1 Node 1 - GET sed -> Result NULL --> Expected NULL
1135 Node 2 GET -> Key sed
1136 Client 1 Node 2 - GET sed -> Result NULL --> Expected NULL
1137 Node 3 GET -> Key sed
1138 Client 1 Node 3 - GET sed -> Result NULL --> Expected NULL
1139
1140 Node 1 Remove! -> Key tempus
1141 Client 1 Node 1 - REMOVE tempus -> Result elementum
1142 Client 1 Delay: 0.6249527533909974 seconds
1143 Node 2 Updated Remove! -> Key tempus
1144 Node 3 Updated Remove! -> Key tempus
1145 Node 1 GET -> Key tempus
1146 Client 1 Node 1 - GET tempus -> Result NULL --> Expected NULL
1147 Node 2 GET -> Key tempus
1148 Client 1 Node 2 - GET tempus -> Result NULL --> Expected NULL
1149 Node 3 GET -> Key tempus
1150 Client 1 Node 3 - GET tempus -> Result NULL --> Expected NULL
1151
1152 Node 1 Remove! -> Key ornare
1153 Client 1 Node 1 - REMOVE ornare -> Result tempor
1154 Client 1 Delay: 1.0087273302374817 seconds
1155 Node 2 Updated Remove! -> Key ornare
1156 Node 3 Updated Remove! -> Key ornare
1157 Node 1 GET -> Key ornare
1158 Client 1 Node 1 - GET ornare -> Result NULL --> Expected NULL
1159 Node 2 GET -> Key ornare
1160 Client 1 Node 2 - GET ornare -> Result NULL --> Expected NULL
1161 Node 3 GET -> Key ornare
1162 Client 1 Node 3 - GET ornare -> Result NULL --> Expected NULL
1163
1164 Node 1 Remove! -> Key facilisis
1165 Client 1 Node 1 - REMOVE facilisis -> Result Donec
1166 Client 1 Delay: 0.9849303341811707 seconds
1167 Node 2 Updated Remove! -> Key facilisis
1168 Node 3 Updated Remove! -> Key facilisis
1169 Node 1 GET -> Key facilisis
1170 Client 1 Node 1 - GET facilisis -> Result NULL --> Expected NULL
1171 Node 2 GET -> Key facilisis
1172 Client 1 Node 2 - GET facilisis -> Result NULL --> Expected NULL
1173 Node 3 GET -> Key facilisis
1174 Client 1 Node 3 - GET facilisis -> Result NULL --> Expected NULL
1175
1176 Node 1 Remove! -> Key elit
1177 Client 1 Node 1 - REMOVE elit -> Result magna
```

File - driver

```
1178 Client 1 Delay: 0.9015845812305916 seconds
1179 Node 1 Remove! -> Key turpis
1180 Client 0 Node 1 - REMOVE turpis -> Result libero
1181 Client 0 Delay: 0.8670276784186328 seconds
1182 Node 2 Updated Remove! -> Key elit
1183 Node 3 Updated Remove! -> Key elit
1184 Node 1 GET -> Key elit
1185 Client 1 Node 1 - GET elit -> Result NULL --> Expected NULL
1186 Node 2 GET -> Key elit
1187 Client 1 Node 2 - GET elit -> Result NULL --> Expected NULL
1188 Node 3 GET -> Key elit
1189 Client 1 Node 3 - GET elit -> Result NULL --> Expected NULL
1190
1191 Node 1 Remove! -> Key Suspendisse
1192 Client 1 Node 1 - REMOVE Suspendisse -> Result Sed
1193 Client 1 Delay: 1.1845627745311749 seconds
1194 Node 1 GET -> Key turpis
1195 Client 0 Node 1 - GET turpis -> Result NULL --> Expected NULL
1196 Node 2 GET -> Key turpis
1197 Client 0 Node 2 - GET turpis -> Result libero --> Expected NULL
1198 Node 3 GET -> Key turpis
1199 Client 0 Node 3 - GET turpis -> Result libero --> Expected NULL
1200
1201 Node 1 Remove! -> Key magna
1202 Client 0 Node 1 - REMOVE magna -> Result magna
1203 Client 0 Delay: 0.591877441425105 seconds
1204 Node 2 Updated Remove! -> Key turpis
1205 Node 3 Updated Remove! -> Key turpis
1206 Node 1 GET -> Key magna
1207 Client 0 Node 1 - GET magna -> Result NULL --> Expected NULL
1208 Node 2 GET -> Key magna
1209 Client 0 Node 2 - GET magna -> Result magna --> Expected NULL
1210 Node 3 GET -> Key magna
1211 Client 0 Node 3 - GET magna -> Result magna --> Expected NULL
1212
1213 Node 1 Remove! -> Key tempus
1214 Client 0 Node 1 - REMOVE tempus -> Result NULL
1215 Client 0 Delay: 1.1927747063049985 seconds
1216 Node 2 Updated Remove! -> Key Suspendisse
1217 Node 3 Updated Remove! -> Key Suspendisse
1218 Node 1 GET -> Key Suspendisse
1219 Client 1 Node 1 - GET Suspendisse -> Result NULL --> Expected NULL
1220 Node 2 GET -> Key Suspendisse
1221 Client 1 Node 2 - GET Suspendisse -> Result NULL --> Expected NULL
1222 Node 3 GET -> Key Suspendisse
1223 Client 1 Node 3 - GET Suspendisse -> Result NULL --> Expected NULL
1224
1225 Node 1 Remove! -> Key purus
1226 Client 1 Node 1 - REMOVE purus -> Result porta
1227 Client 1 Delay: 1.0894980597967578 seconds
1228 Node 2 Updated Remove! -> Key magna
1229 Node 3 Updated Remove! -> Key magna
1230 Node 1 GET -> Key tempus
1231 Client 0 Node 1 - GET tempus -> Result NULL --> Expected NULL
1232 Node 2 GET -> Key tempus
1233 Client 0 Node 2 - GET tempus -> Result NULL --> Expected NULL
1234 Node 3 GET -> Key tempus
1235 Client 0 Node 3 - GET tempus -> Result NULL --> Expected NULL
1236
1237 Node 1 Remove! -> Key nec
1238 Client 0 Node 1 - REMOVE nec -> Result ac
1239 Client 0 Delay: 0.8467857609377168 seconds
```

File - driver

1240 Node 2 Updated Remove! -> Key purus
1241 Node 3 Updated Remove! -> Key purus
1242 Node 1 GET -> Key purus
1243 Client 1 Node 1 - GET purus -> Result NULL --> Expected NULL
1244 Node 2 GET -> Key purus
1245 Client 1 Node 2 - GET purus -> Result NULL --> Expected NULL
1246 Node 3 GET -> Key purus
1247 Client 1 Node 3 - GET purus -> Result NULL --> Expected NULL
1248
1249 Node 1 Remove! -> Key cursus
1250 Client 1 Node 1 - REMOVE cursus -> Result vitae
1251 Client 1 Delay: 0.8133634420368344 seconds
1252 Node 1 GET -> Key nec
1253 Client 0 Node 1 - GET nec -> Result NULL --> Expected NULL
1254 Node 2 GET -> Key nec
1255 Client 0 Node 2 - GET nec -> Result ac --> Expected NULL
1256 Node 3 GET -> Key nec
1257 Client 0 Node 3 - GET nec -> Result ac --> Expected NULL
1258
1259 Node 1 Remove! -> Key sapien
1260 Client 0 Node 1 - REMOVE sapien -> Result Suspendisse
1261 Client 0 Delay: 1.0082590131654792 seconds
1262 Node 2 Updated Remove! -> Key nec
1263 Node 3 Updated Remove! -> Key nec
1264 Node 1 GET -> Key cursus
1265 Client 1 Node 1 - GET cursus -> Result NULL --> Expected NULL
1266 Node 2 GET -> Key cursus
1267 Client 1 Node 2 - GET cursus -> Result vitae --> Expected NULL
1268 Node 3 GET -> Key cursus
1269 Client 1 Node 3 - GET cursus -> Result vitae --> Expected NULL
1270
1271 Node 1 Remove! -> Key Nunc
1272 Client 1 Node 1 - REMOVE Nunc -> Result ultricies
1273 Client 1 Delay: 1.0417044954253556 seconds
1274 Node 2 Updated Remove! -> Key cursus
1275 Node 3 Updated Remove! -> Key cursus
1276 Node 1 GET -> Key sapien
1277 Client 0 Node 1 - GET sapien -> Result NULL --> Expected NULL
1278 Node 2 GET -> Key sapien
1279 Client 0 Node 2 - GET sapien -> Result Suspendisse --> Expected NULL
1280 Node 3 GET -> Key sapien
1281 Client 0 Node 3 - GET sapien -> Result Suspendisse --> Expected NULL
1282
1283 Node 1 Remove! -> Key at
1284 Client 0 Node 1 - REMOVE at -> Result dolor
1285 Client 0 Delay: 0.7911246583347065 seconds
1286 Node 2 Updated Remove! -> Key sapien
1287 Node 3 Updated Remove! -> Key sapien
1288 Node 1 GET -> Key Nunc
1289 Client 1 Node 1 - GET Nunc -> Result NULL --> Expected NULL
1290 Node 2 GET -> Key Nunc
1291 Client 1 Node 2 - GET Nunc -> Result ultricies --> Expected NULL
1292 Node 3 GET -> Key Nunc
1293 Client 1 Node 3 - GET Nunc -> Result ultricies --> Expected NULL
1294
1295 Node 1 Remove! -> Key mattis
1296 Client 1 Node 1 - REMOVE mattis -> Result ut
1297 Client 1 Delay: 1.0804790099173973 seconds
1298 Node 2 Updated Remove! -> Key Nunc
1299 Node 3 Updated Remove! -> Key Nunc
1300 Node 1 GET -> Key at
1301 Client 0 Node 1 - GET at -> Result NULL --> Expected NULL

File - driver

```
1302 Node 2 GET -> Key at
1303 Client 0 Node 2 - GET at -> Result dolor --> Expected NULL
1304 Node 3 GET -> Key at
1305 Client 0 Node 3 - GET at -> Result dolor --> Expected NULL
1306
1307 Node 1 Remove! -> Key interdum
1308 Client 0 Node 1 - REMOVE interdum -> Result elementum
1309 Client 0 Delay: 1.0923250069360075 seconds
1310 Node 1 GET -> Key mattis
1311 Client 1 Node 1 - GET mattis -> Result NULL --> Expected NULL
1312 Node 2 GET -> Key mattis
1313 Client 1 Node 2 - GET mattis -> Result ut --> Expected NULL
1314 Node 3 GET -> Key mattis
1315 Client 1 Node 3 - GET mattis -> Result ut --> Expected NULL
1316
1317 Node 1 Remove! -> Key ligula
1318 Client 1 Node 1 - REMOVE ligula -> Result eget
1319 Client 1 Delay: 1.1660208770260527 seconds
1320 Node 2 Updated Remove! -> Key at
1321 Node 3 Updated Remove! -> Key at
1322 Node 1 GET -> Key interdum
1323 Client 0 Node 1 - GET interdum -> Result NULL --> Expected NULL
1324 Node 2 GET -> Key interdum
1325 Client 0 Node 2 - GET interdum -> Result elementum --> Expected NULL
1326 Node 3 GET -> Key interdum
1327 Client 0 Node 3 - GET interdum -> Result elementum --> Expected NULL
1328
1329 Node 1 Remove! -> Key fermentum
1330 Client 0 Node 1 - REMOVE fermentum -> Result Duis
1331 Client 0 Delay: 1.181299258716563 seconds
1332 Node 2 Updated Remove! -> Key mattis
1333 Node 3 Updated Remove! -> Key mattis
1334 Node 1 GET -> Key ligula
1335 Client 1 Node 1 - GET ligula -> Result NULL --> Expected NULL
1336 Node 2 GET -> Key ligula
1337 Client 1 Node 2 - GET ligula -> Result eget --> Expected NULL
1338 Node 3 GET -> Key ligula
1339 Client 1 Node 3 - GET ligula -> Result eget --> Expected NULL
1340
1341 Node 1 Remove! -> Key erat
1342 Client 1 Node 1 - REMOVE erat -> Result mi
1343 Client 1 Delay: 1.0360197738913692 seconds
1344 Node 2 Updated Remove! -> Key interdum
1345 Node 3 Updated Remove! -> Key interdum
1346 Node 1 GET -> Key fermentum
1347 Client 0 Node 1 - GET fermentum -> Result NULL --> Expected NULL
1348 Node 2 GET -> Key fermentum
1349 Client 0 Node 2 - GET fermentum -> Result Duis --> Expected NULL
1350 Node 3 GET -> Key fermentum
1351 Client 0 Node 3 - GET fermentum -> Result Duis --> Expected NULL
1352
1353 Node 1 Remove! -> Key nulla
1354 Client 0 Node 1 - REMOVE nulla -> Result NULL
1355 Client 0 Delay: 1.1590180902336098 seconds
1356 Node 1 GET -> Key erat
1357 Client 1 Node 1 - GET erat -> Result NULL --> Expected NULL
1358 Node 2 GET -> Key erat
1359 Client 1 Node 2 - GET erat -> Result mi --> Expected NULL
1360 Node 3 GET -> Key erat
1361 Client 1 Node 3 - GET erat -> Result mi --> Expected NULL
1362
1363 Node 1 Remove! -> Key blandit
```

File - driver

```
1364 Client 1 Node 1 - REMOVE blandit -> Result risus
1365 Client 1 Delay: 0.9394807078792593 seconds
1366 Node 2 Updated Remove! -> Key ligula
1367 Node 3 Updated Remove! -> Key ligula
1368 Node 1 GET -> Key nulla
1369 Client 0 Node 1 - GET nulla -> Result NULL --> Expected NULL
1370 Node 2 GET -> Key nulla
1371 Client 0 Node 2 - GET nulla -> Result NULL --> Expected NULL
1372 Node 3 GET -> Key nulla
1373 Client 0 Node 3 - GET nulla -> Result NULL --> Expected NULL
1374
1375 Node 1 Remove! -> Key mauris
1376 Client 0 Node 1 - REMOVE mauris -> Result Vestibulum
1377 Client 0 Delay: 0.7475138121747774 seconds
1378 Node 1 GET -> Key blandit
1379 Client 1 Node 1 - GET blandit -> Result NULL --> Expected NULL
1380 Node 2 GET -> Key blandit
1381 Client 1 Node 2 - GET blandit -> Result risus --> Expected NULL
1382 Node 3 GET -> Key blandit
1383 Client 1 Node 3 - GET blandit -> Result risus --> Expected NULL
1384
1385 Node 1 Remove! -> Key varius
1386 Client 1 Node 1 - REMOVE varius -> Result Morbi
1387 Client 1 Delay: 1.195397283363446 seconds
1388 Node 2 Updated Remove! -> Key fermentum
1389 Node 3 Updated Remove! -> Key fermentum
1390 Node 1 GET -> Key mauris
1391 Client 0 Node 1 - GET mauris -> Result NULL --> Expected NULL
1392 Node 2 GET -> Key mauris
1393 Client 0 Node 2 - GET mauris -> Result Vestibulum --> Expected NULL
1394 Node 3 GET -> Key mauris
1395 Client 0 Node 3 - GET mauris -> Result Vestibulum --> Expected NULL
1396
1397 Node 1 Remove! -> Key elementum
1398 Client 0 Node 1 - REMOVE elementum -> Result orci
1399 Client 0 Delay: 0.6701254189906707 seconds
1400 Node 2 Updated Remove! -> Key erat
1401 Node 3 Updated Remove! -> Key erat
1402 Node 1 GET -> Key elementum
1403 Client 0 Node 1 - GET elementum -> Result NULL --> Expected NULL
1404 Node 2 GET -> Key elementum
1405 Client 0 Node 2 - GET elementum -> Result orci --> Expected NULL
1406 Node 3 GET -> Key elementum
1407 Client 0 Node 3 - GET elementum -> Result orci --> Expected NULL
1408
1409 Node 1 Remove! -> Key et
1410 Client 0 Node 1 - REMOVE et -> Result dolor
1411 Client 0 Delay: 1.0276394569437608 seconds
1412 Node 1 GET -> Key varius
1413 Client 1 Node 1 - GET varius -> Result NULL --> Expected NULL
1414 Node 2 GET -> Key varius
1415 Client 1 Node 2 - GET varius -> Result Morbi --> Expected NULL
1416 Node 3 GET -> Key varius
1417 Client 1 Node 3 - GET varius -> Result Morbi --> Expected NULL
1418
1419 Node 1 Remove! -> Key Proin
1420 Client 1 Node 1 - REMOVE Proin -> Result a
1421 Client 1 Delay: 0.9157526949073295 seconds
1422 Node 2 Updated Remove! -> Key blandit
1423 Node 3 Updated Remove! -> Key blandit
1424 Node 1 GET -> Key et
1425 Client 0 Node 1 - GET et -> Result NULL --> Expected NULL
```

File - driver

```
1426 Node 2 GET -> Key et
1427 Client 0 Node 2 - GET et -> Result dolor --> Expected NULL
1428 Node 3 GET -> Key et
1429 Client 0 Node 3 - GET et -> Result dolor --> Expected NULL
1430
1431 Node 1 Remove! -> Key gravida
1432 Client 0 Node 1 - REMOVE gravida -> Result Etiam
1433 Client 0 Delay: 1.0542726368616835 seconds
1434 Node 1 GET -> Key Proin
1435 Client 1 Node 1 - GET Proin -> Result NULL --> Expected NULL
1436 Node 2 GET -> Key Proin
1437 Client 1 Node 2 - GET Proin -> Result a --> Expected NULL
1438 Node 3 GET -> Key Proin
1439 Client 1 Node 3 - GET Proin -> Result a --> Expected NULL
1440
1441 Node 1 Remove! -> Key orci
1442 Client 1 Node 1 - REMOVE orci -> Result eros
1443 Client 1 Delay: 0.9854174082916854 seconds
1444 Node 2 Updated Remove! -> Key mauris
1445 Node 3 Updated Remove! -> Key mauris
1446 Node 2 Updated Remove! -> Key varius
1447 Node 3 Updated Remove! -> Key varius
1448 Node 1 GET -> Key gravida
1449 Client 0 Node 1 - GET gravida -> Result NULL --> Expected NULL
1450 Node 2 GET -> Key gravida
1451 Client 0 Node 2 - GET gravida -> Result Etiam --> Expected NULL
1452 Node 3 GET -> Key gravida
1453 Client 0 Node 3 - GET gravida -> Result Etiam --> Expected NULL
1454
1455 Node 1 Remove! -> Key lacus
1456 Client 0 Node 1 - REMOVE lacus -> Result nonummy
1457 Client 0 Delay: 0.540842193613801 seconds
1458 Node 1 GET -> Key orci
1459 Client 1 Node 1 - GET orci -> Result NULL --> Expected NULL
1460 Node 2 GET -> Key orci
1461 Client 1 Node 2 - GET orci -> Result eros --> Expected NULL
1462 Node 3 GET -> Key orci
1463 Client 1 Node 3 - GET orci -> Result eros --> Expected NULL
1464
1465 Node 1 Remove! -> Key a
1466 Client 1 Node 1 - REMOVE a -> Result at
1467 Client 1 Delay: 0.782944786301001 seconds
1468 Node 1 GET -> Key lacus
1469 Client 0 Node 1 - GET lacus -> Result NULL --> Expected NULL
1470 Node 2 GET -> Key lacus
1471 Client 0 Node 2 - GET lacus -> Result nonummy --> Expected NULL
1472 Node 3 GET -> Key lacus
1473 Client 0 Node 3 - GET lacus -> Result nonummy --> Expected NULL
1474
1475 Node 1 Remove! -> Key malesuada
1476 Client 0 Node 1 - REMOVE malesuada -> Result Aliquam
1477 Client 0 Delay: 0.7598928537842848 seconds
1478 Node 2 Updated Remove! -> Key elementum
1479 Node 3 Updated Remove! -> Key elementum
1480 Node 1 GET -> Key a
1481 Client 1 Node 1 - GET a -> Result NULL --> Expected NULL
1482 Node 2 GET -> Key a
1483 Client 1 Node 2 - GET a -> Result at --> Expected NULL
1484 Node 3 GET -> Key a
1485 Client 1 Node 3 - GET a -> Result at --> Expected NULL
1486
1487 Node 1 Remove! -> Key magnis
```

File - driver

```
1488 Client 1 Node 1 - REMOVE magnis -> Result aliquet
1489 Client 1 Delay: 0.5313309287424755 seconds
1490 Node 2 Updated Remove! -> Key et
1491 Node 3 Updated Remove! -> Key et
1492 Node 1 GET -> Key malesuada
1493 Client 0 Node 1 - GET malesuada -> Result NULL --> Expected NULL
1494 Node 2 GET -> Key malesuada
1495 Client 0 Node 2 - GET malesuada -> Result Aliquam --> Expected NULL
1496 Node 3 GET -> Key malesuada
1497 Client 0 Node 3 - GET malesuada -> Result Aliquam --> Expected NULL
1498
1499 Node 1 Remove! -> Key In
1500 Client 0 Node 1 - REMOVE In -> Result lorem
1501 Client 0 Delay: 1.0761343046517169 seconds
1502 Node 1 GET -> Key magnis
1503 Client 1 Node 1 - GET magnis -> Result NULL --> Expected NULL
1504 Node 2 GET -> Key magnis
1505 Client 1 Node 2 - GET magnis -> Result aliquet --> Expected NULL
1506 Node 3 GET -> Key magnis
1507 Client 1 Node 3 - GET magnis -> Result aliquet --> Expected NULL
1508
1509 Node 1 Remove! -> Key Quisque
1510 Client 1 Node 1 - REMOVE Quisque -> Result vitae
1511 Client 1 Delay: 1.0740867633515734 seconds
1512 Node 2 Updated Remove! -> Key Proin
1513 Node 3 Updated Remove! -> Key Proin
1514 Node 2 Updated Remove! -> Key gravida
1515 Node 3 Updated Remove! -> Key gravida
1516 Node 1 GET -> Key In
1517 Client 0 Node 1 - GET In -> Result NULL --> Expected NULL
1518 Node 2 GET -> Key In
1519 Client 0 Node 2 - GET In -> Result lorem --> Expected NULL
1520 Node 3 GET -> Key In
1521 Client 0 Node 3 - GET In -> Result lorem --> Expected NULL
1522
1523 Node 1 Remove! -> Key Duis
1524 Client 0 Node 1 - REMOVE Duis -> Result euismod
1525 Client 0 Delay: 0.9227156053374549 seconds
1526 Node 2 Updated Remove! -> Key orci
1527 Node 3 Updated Remove! -> Key orci
1528 Node 1 GET -> Key Quisque
1529 Client 1 Node 1 - GET Quisque -> Result NULL --> Expected NULL
1530 Node 2 GET -> Key Quisque
1531 Client 1 Node 2 - GET Quisque -> Result vitae --> Expected NULL
1532 Node 3 GET -> Key Quisque
1533 Client 1 Node 3 - GET Quisque -> Result vitae --> Expected NULL
1534
1535 Node 1 Remove! -> Key interdum
1536 Client 1 Node 1 - REMOVE interdum -> Result NULL
1537 Client 1 Delay: 0.6597787468562597 seconds
1538 Node 1 GET -> Key interdum
1539 Client 1 Node 1 - GET interdum -> Result NULL --> Expected NULL
1540 Node 2 GET -> Key interdum
1541 Client 1 Node 2 - GET interdum -> Result NULL --> Expected NULL
1542 Node 3 GET -> Key interdum
1543 Client 1 Node 3 - GET interdum -> Result NULL --> Expected NULL
1544
1545 Node 1 Remove! -> Key magna
1546 Client 1 Node 1 - REMOVE magna -> Result NULL
1547 Client 1 Delay: 0.9990491127515779 seconds
1548 Node 2 Updated Remove! -> Key lacus
1549 Node 3 Updated Remove! -> Key lacus
```

File - driver

```
1550 Node 1 GET -> Key Duis
1551 Client 0 Node 1 - GET Duis -> Result NULL --> Expected NULL
1552 Node 2 GET -> Key Duis
1553 Client 0 Node 2 - GET Duis -> Result euismod --> Expected NULL
1554 Node 3 GET -> Key Duis
1555 Client 0 Node 3 - GET Duis -> Result euismod --> Expected NULL
1556
1557 Node 1 Remove! -> Key Aenean
1558 Client 0 Node 1 - REMOVE Aenean -> Result Fusce
1559 Client 0 Delay: 0.6884635464354605 seconds
1560 Node 2 Updated Remove! -> Key a
1561 Node 3 Updated Remove! -> Key a
1562 Node 1 GET -> Key Aenean
1563 Client 0 Node 1 - GET Aenean -> Result NULL --> Expected NULL
1564 Node 2 GET -> Key Aenean
1565 Client 0 Node 2 - GET Aenean -> Result Fusce --> Expected NULL
1566 Node 3 GET -> Key Aenean
1567 Client 0 Node 3 - GET Aenean -> Result Fusce --> Expected NULL
1568
1569 Node 1 Remove! -> Key ipsum
1570 Client 0 Node 1 - REMOVE ipsum -> Result in
1571 Client 0 Delay: 0.585957884642728 seconds
1572 Node 1 GET -> Key magna
1573 Client 1 Node 1 - GET magna -> Result NULL --> Expected NULL
1574 Node 2 GET -> Key magna
1575 Client 1 Node 2 - GET magna -> Result NULL --> Expected NULL
1576 Node 3 GET -> Key magna
1577 Client 1 Node 3 - GET magna -> Result NULL --> Expected NULL
1578
1579 Node 1 Remove! -> Key lorem
1580 Client 1 Node 1 - REMOVE lorem -> Result vel
1581 Client 1 Delay: 0.6564139190973265 seconds
1582 Node 1 GET -> Key ipsum
1583 Client 0 Node 1 - GET ipsum -> Result NULL --> Expected NULL
1584 Node 2 GET -> Key ipsum
1585 Client 0 Node 2 - GET ipsum -> Result in --> Expected NULL
1586 Node 3 GET -> Key ipsum
1587 Client 0 Node 3 - GET ipsum -> Result in --> Expected NULL
1588
1589 Node 1 Remove! -> Key Vestibulum
1590 Client 0 Node 1 - REMOVE Vestibulum -> Result ipsum
1591 Client 0 Delay: 0.7951738270083915 seconds
1592 Node 2 Updated Remove! -> Key malesuada
1593 Node 3 Updated Remove! -> Key malesuada
1594 Node 1 GET -> Key lorem
1595 Client 1 Node 1 - GET lorem -> Result NULL --> Expected NULL
1596 Node 2 GET -> Key lorem
1597 Client 1 Node 2 - GET lorem -> Result vel --> Expected NULL
1598 Node 3 GET -> Key lorem
1599 Client 1 Node 3 - GET lorem -> Result vel --> Expected NULL
1600
1601 Node 1 Remove! -> Key Morbi
1602 Client 1 Node 1 - REMOVE Morbi -> Result turpis
1603 Client 1 Delay: 1.016207098638956 seconds
1604 Node 1 GET -> Key Vestibulum
1605 Client 0 Node 1 - GET Vestibulum -> Result NULL --> Expected NULL
1606 Node 2 GET -> Key Vestibulum
1607 Client 0 Node 2 - GET Vestibulum -> Result ipsum --> Expected NULL
1608 Node 3 GET -> Key Vestibulum
1609 Client 0 Node 3 - GET Vestibulum -> Result ipsum --> Expected NULL
1610
1611 Node 1 Remove! -> Key Fusce
```

File - driver

```
1612 Client 0 Node 1 - REMOVE Fusce -> Result Nunc
1613 Client 0 Delay: 0.708540647669694 seconds
1614 Node 2 Updated Remove! -> Key magnis
1615 Node 3 Updated Remove! -> Key magnis
1616 Node 1 GET -> Key Morbi
1617 Client 1 Node 1 - GET Morbi -> Result NULL --> Expected NULL
1618 Node 2 GET -> Key Morbi
1619 Client 1 Node 2 - GET Morbi -> Result turpis --> Expected NULL
1620 Node 3 GET -> Key Morbi
1621 Client 1 Node 3 - GET Morbi -> Result turpis --> Expected NULL
1622
1623 Node 1 Remove! -> Key luctus
1624 Client 1 Node 1 - REMOVE luctus -> Result sem
1625 Client 1 Delay: 0.8201238995471233 seconds
1626 Node 2 Updated Remove! -> Key In
1627 Node 3 Updated Remove! -> Key In
1628 Node 1 GET -> Key Fusce
1629 Client 0 Node 1 - GET Fusce -> Result NULL --> Expected NULL
1630 Node 2 GET -> Key Fusce
1631 Client 0 Node 2 - GET Fusce -> Result Nunc --> Expected NULL
1632 Node 3 GET -> Key Fusce
1633 Client 0 Node 3 - GET Fusce -> Result Nunc --> Expected NULL
1634
1635 Node 1 Remove! -> Key Integer
1636 Client 0 Node 1 - REMOVE Integer -> Result at
1637 Client 0 Delay: 1.182023001206583 seconds
1638 Node 2 Updated Remove! -> Key Quisque
1639 Node 3 Updated Remove! -> Key Quisque
1640 Node 1 GET -> Key luctus
1641 Client 1 Node 1 - GET luctus -> Result NULL --> Expected NULL
1642 Node 2 GET -> Key luctus
1643 Client 1 Node 2 - GET luctus -> Result sem --> Expected NULL
1644 Node 3 GET -> Key luctus
1645 Client 1 Node 3 - GET luctus -> Result sem --> Expected NULL
1646
1647 Node 1 Remove! -> Key sit
1648 Client 1 Node 1 - REMOVE sit -> Result augue
1649 Client 1 Delay: 0.7397991623316595 seconds
1650 Node 1 GET -> Key Integer
1651 Client 0 Node 1 - GET Integer -> Result NULL --> Expected NULL
1652 Node 2 GET -> Key Integer
1653 Client 0 Node 2 - GET Integer -> Result at --> Expected NULL
1654 Node 3 GET -> Key Integer
1655 Client 0 Node 3 - GET Integer -> Result at --> Expected NULL
1656
1657 Node 1 Remove! -> Key Aliquam
1658 Client 0 Node 1 - REMOVE Aliquam -> Result sem
1659 Client 0 Delay: 0.9338424085346718 seconds
1660 Node 1 GET -> Key sit
1661 Client 1 Node 1 - GET sit -> Result NULL --> Expected NULL
1662 Node 2 GET -> Key sit
1663 Client 1 Node 2 - GET sit -> Result augue --> Expected NULL
1664 Node 3 GET -> Key sit
1665 Client 1 Node 3 - GET sit -> Result augue --> Expected NULL
1666
1667 Node 1 Remove! -> Key et
1668 Client 1 Node 1 - REMOVE et -> Result NULL
1669 Client 1 Delay: 1.1092190338954384 seconds
1670 Node 2 Updated Remove! -> Key Duis
1671 Node 3 Updated Remove! -> Key Duis
1672 Node 2 Updated Remove! -> Key Aenean
1673 Node 3 Updated Remove! -> Key Aenean
```

File - driver

```
1674 Node 1 GET -> Key Aliquam
1675 Client 0 Node 1 - GET Aliquam -> Result NULL --> Expected NULL
1676 Node 2 GET -> Key Aliquam
1677 Client 0 Node 2 - GET Aliquam -> Result sem --> Expected NULL
1678 Node 3 GET -> Key Aliquam
1679 Client 0 Node 3 - GET Aliquam -> Result sem --> Expected NULL
1680
1681 Node 1 Remove! -> Key vel
1682 Client 0 Node 1 - REMOVE vel -> Result non
1683 Client 0 Delay: 0.7993317350054991 seconds
1684 Node 1 GET -> Key et
1685 Client 1 Node 1 - GET et -> Result NULL --> Expected NULL
1686 Node 2 GET -> Key et
1687 Client 1 Node 2 - GET et -> Result NULL --> Expected NULL
1688 Node 3 GET -> Key et
1689 Client 1 Node 3 - GET et -> Result NULL --> Expected NULL
1690
1691 Node 1 Remove! -> Key Donec
1692 Client 1 Node 1 - REMOVE Donec -> Result fringilla
1693 Client 1 Delay: 1.0357155222597938 seconds
1694 Node 2 Updated Remove! -> Key ipsum
1695 Node 3 Updated Remove! -> Key ipsum
1696 Node 1 GET -> Key vel
1697 Client 0 Node 1 - GET vel -> Result NULL --> Expected NULL
1698 Node 2 GET -> Key vel
1699 Client 0 Node 2 - GET vel -> Result non --> Expected NULL
1700 Node 3 GET -> Key vel
1701 Client 0 Node 3 - GET vel -> Result non --> Expected NULL
1702
1703 Node 1 Remove! -> Key lectus
1704 Client 0 Node 1 - REMOVE lectus -> Result semper
1705 Client 0 Delay: 1.1934485880639525 seconds
1706 Node 2 Updated Remove! -> Key lorem
1707 Node 3 Updated Remove! -> Key lorem
1708 Node 1 GET -> Key Donec
1709 Client 1 Node 1 - GET Donec -> Result NULL --> Expected NULL
1710 Node 2 GET -> Key Donec
1711 Client 1 Node 2 - GET Donec -> Result fringilla --> Expected NULL
1712 Node 3 GET -> Key Donec
1713 Client 1 Node 3 - GET Donec -> Result fringilla --> Expected NULL
1714
1715 Node 1 Remove! -> Key consectetur
1716 Client 1 Node 1 - REMOVE consectetur -> Result nisi
1717 Client 1 Delay: 0.6709461707140145 seconds
1718 Node 2 Updated Remove! -> Key Vestibulum
1719 Node 3 Updated Remove! -> Key Vestibulum
1720 Node 2 Updated Remove! -> Key Morbi
1721 Node 3 Updated Remove! -> Key Morbi
1722 Node 1 GET -> Key consectetur
1723 Client 1 Node 1 - GET consectetur -> Result NULL --> Expected NULL
1724 Node 2 GET -> Key consectetur
1725 Client 1 Node 2 - GET consectetur -> Result nisi --> Expected NULL
1726 Node 3 GET -> Key consectetur
1727 Client 1 Node 3 - GET consectetur -> Result nisi --> Expected NULL
1728
1729 Node 1 Remove! -> Key semper
1730 Client 1 Node 1 - REMOVE semper -> Result Donec
1731 Client 1 Delay: 1.0549707008214528 seconds
1732 Node 1 GET -> Key lectus
1733 Client 0 Node 1 - GET lectus -> Result NULL --> Expected NULL
1734 Node 2 GET -> Key lectus
1735 Client 0 Node 2 - GET lectus -> Result semper --> Expected NULL
```

File - driver

```
1736 Node 3 GET -> Key lectus
1737 Client 0 Node 3 - GET lectus -> Result semper --> Expected NULL
1738
1739 Node 1 Remove! -> Key dignissim
1740 Client 0 Node 1 - REMOVE dignissim -> Result eget
1741 Client 0 Delay: 0.6512445708323138 seconds
1742 Node 1 GET -> Key dignissim
1743 Client 0 Node 1 - GET dignissim -> Result NULL --> Expected NULL
1744 Node 2 GET -> Key dignissim
1745 Client 0 Node 2 - GET dignissim -> Result eget --> Expected NULL
1746 Node 3 GET -> Key dignissim
1747 Client 0 Node 3 - GET dignissim -> Result eget --> Expected NULL
1748
1749 Node 1 Remove! -> Key Donec
1750 Client 0 Node 1 - REMOVE Donec -> Result NULL
1751 Client 0 Delay: 1.191706675459359 seconds
1752 Node 2 Updated Remove! -> Key Fusce
1753 Node 3 Updated Remove! -> Key Fusce
1754 Node 2 Updated Remove! -> Key luctus
1755 Node 3 Updated Remove! -> Key luctus
1756 Node 1 GET -> Key semper
1757 Client 1 Node 1 - GET semper -> Result NULL --> Expected NULL
1758 Node 2 GET -> Key semper
1759 Client 1 Node 2 - GET semper -> Result Donec --> Expected NULL
1760 Node 3 GET -> Key semper
1761 Client 1 Node 3 - GET semper -> Result Donec --> Expected NULL
1762
1763 Node 1 Remove! -> Key vel
1764 Client 1 Node 1 - REMOVE vel -> Result NULL
1765 Client 1 Delay: 0.531893495908837 seconds
1766 Node 2 Updated Remove! -> Key Integer
1767 Node 3 Updated Remove! -> Key Integer
1768 Node 1 GET -> Key vel
1769 Client 1 Node 1 - GET vel -> Result NULL --> Expected NULL
1770 Node 2 GET -> Key vel
1771 Client 1 Node 2 - GET vel -> Result non --> Expected NULL
1772 Node 3 GET -> Key vel
1773 Client 1 Node 3 - GET vel -> Result non --> Expected NULL
1774
1775 Node 1 Remove! -> Key nec
1776 Client 1 Node 1 - REMOVE nec -> Result NULL
1777 Client 1 Delay: 0.7996572414833216 seconds
1778 Node 1 GET -> Key Donec
1779 Client 0 Node 1 - GET Donec -> Result NULL --> Expected NULL
1780 Node 2 GET -> Key Donec
1781 Client 0 Node 2 - GET Donec -> Result fringilla --> Expected NULL
1782 Node 3 GET -> Key Donec
1783 Client 0 Node 3 - GET Donec -> Result fringilla --> Expected NULL
1784
1785 Node 1 Remove! -> Key nascetur
1786 Client 0 Node 1 - REMOVE nascetur -> Result convallis
1787 Client 0 Delay: 1.1336655837506175 seconds
1788 Node 2 Updated Remove! -> Key sit
1789 Node 3 Updated Remove! -> Key sit
1790 Node 2 Updated Remove! -> Key Aliquam
1791 Node 3 Updated Remove! -> Key Aliquam
1792 Node 1 GET -> Key nec
1793 Client 1 Node 1 - GET nec -> Result NULL --> Expected NULL
1794 Node 2 GET -> Key nec
1795 Client 1 Node 2 - GET nec -> Result NULL --> Expected NULL
1796 Node 3 GET -> Key nec
1797 Client 1 Node 3 - GET nec -> Result NULL --> Expected NULL
```

File - driver

1798
1799 Node 1 Remove! -> Key Pellentesque
1800 Client 1 Node 1 - REMOVE Pellentesque -> Result nec
1801 Client 1 Delay: 0.5497666222724206 seconds
1802 Node 1 GET -> Key Pellentesque
1803 Client 1 Node 1 - GET Pellentesque -> Result NULL --> Expected NULL
1804 Node 2 GET -> Key Pellentesque
1805 Client 1 Node 2 - GET Pellentesque -> Result nec --> Expected NULL
1806 Node 3 GET -> Key Pellentesque
1807 Client 1 Node 3 - GET Pellentesque -> Result nec --> Expected NULL
1808
1809 Node 1 Remove! -> Key scelerisque
1810 Client 1 Node 1 - REMOVE scelerisque -> Result augue
1811 Client 1 Delay: 0.6447758113116835 seconds
1812 Node 2 Updated Remove! -> Key vel
1813 Node 3 Updated Remove! -> Key vel
1814 Node 1 GET -> Key nascetur
1815 Client 0 Node 1 - GET nascetur -> Result NULL --> Expected NULL
1816 Node 2 GET -> Key nascetur
1817 Client 0 Node 2 - GET nascetur -> Result convallis --> Expected NULL
1818 Node 3 GET -> Key nascetur
1819 Client 0 Node 3 - GET nascetur -> Result convallis --> Expected NULL
1820
1821 Node 1 Remove! -> Key mus
1822 Client 0 Node 1 - REMOVE mus -> Result tristique
1823 Client 0 Delay: 0.8643703447899697 seconds
1824 Node 1 GET -> Key scelerisque
1825 Client 1 Node 1 - GET scelerisque -> Result NULL --> Expected NULL
1826 Node 2 GET -> Key scelerisque
1827 Client 1 Node 2 - GET scelerisque -> Result augue --> Expected NULL
1828 Node 3 GET -> Key scelerisque
1829 Client 1 Node 3 - GET scelerisque -> Result augue --> Expected NULL
1830
1831 Node 1 Remove! -> Key fringilla
1832 Client 1 Node 1 - REMOVE fringilla -> Result Quisque
1833 Client 1 Delay: 1.1925211023929716 seconds
1834 Node 2 Updated Remove! -> Key Donec
1835 Node 3 Updated Remove! -> Key Donec
1836 Node 1 GET -> Key mus
1837 Client 0 Node 1 - GET mus -> Result NULL --> Expected NULL
1838 Node 2 GET -> Key mus
1839 Client 0 Node 2 - GET mus -> Result tristique --> Expected NULL
1840 Node 3 GET -> Key mus
1841 Client 0 Node 3 - GET mus -> Result tristique --> Expected NULL
1842
1843 Node 1 Remove! -> Key sed
1844 Client 0 Node 1 - REMOVE sed -> Result NULL
1845 Client 0 Delay: 0.8976577165066487 seconds
1846 Node 2 Updated Remove! -> Key lectus
1847 Node 3 Updated Remove! -> Key lectus
1848 Node 1 GET -> Key fringilla
1849 Client 1 Node 1 - GET fringilla -> Result NULL --> Expected NULL
1850 Node 2 GET -> Key fringilla
1851 Client 1 Node 2 - GET fringilla -> Result Quisque --> Expected NULL
1852 Node 3 GET -> Key fringilla
1853 Client 1 Node 3 - GET fringilla -> Result Quisque --> Expected NULL
1854
1855 Node 1 Remove! -> Key metus
1856 Client 1 Node 1 - REMOVE metus -> Result Morbi
1857 Client 1 Delay: 0.6538220722217349 seconds
1858 Node 1 GET -> Key sed
1859 Client 0 Node 1 - GET sed -> Result NULL --> Expected NULL

File - driver

```
1860 Node 2 GET -> Key sed
1861 Client 0 Node 2 - GET sed -> Result NULL --> Expected NULL
1862 Node 3 GET -> Key sed
1863 Client 0 Node 3 - GET sed -> Result NULL --> Expected NULL
1864
1865 Node 1 Remove! -> Key massa
1866 Client 0 Node 1 - REMOVE massa -> Result mattis
1867 Client 0 Delay: 1.1802511399393298 seconds
1868 Node 2 Updated Remove! -> Key consectetur
1869 Node 3 Updated Remove! -> Key consectetur
1870 Node 2 Updated Remove! -> Key semper
1871 Node 3 Updated Remove! -> Key semper
1872 Node 1 GET -> Key metus
1873 Client 1 Node 1 - GET metus -> Result NULL --> Expected NULL
1874 Node 2 GET -> Key metus
1875 Client 1 Node 2 - GET metus -> Result Morbi --> Expected NULL
1876 Node 3 GET -> Key metus
1877 Client 1 Node 3 - GET metus -> Result Morbi --> Expected NULL
1878
1879 Node 1 Remove! -> Key ut
1880 Client 1 Node 1 - REMOVE ut -> Result amet
1881 Client 1 Delay: 1.1954600910962823 seconds
1882 Node 2 Updated Remove! -> Key dignissim
1883 Node 3 Updated Remove! -> Key dignissim
1884 Node 1 GET -> Key massa
1885 Client 0 Node 1 - GET massa -> Result NULL --> Expected NULL
1886 Node 2 GET -> Key massa
1887 Client 0 Node 2 - GET massa -> Result mattis --> Expected NULL
1888 Node 3 GET -> Key massa
1889 Client 0 Node 3 - GET massa -> Result mattis --> Expected NULL
1890
1891 Node 1 Remove! -> Key dictum
1892 Client 0 Node 1 - REMOVE dictum -> Result sem
1893 Client 0 Delay: 1.0114078281394276 seconds
1894 Node 1 GET -> Key ut
1895 Client 1 Node 1 - GET ut -> Result NULL --> Expected NULL
1896 Node 2 GET -> Key ut
1897 Client 1 Node 2 - GET ut -> Result amet --> Expected NULL
1898 Node 3 GET -> Key ut
1899 Client 1 Node 3 - GET ut -> Result amet --> Expected NULL
1900
1901 Node 1 Remove! -> Key augue
1902 Client 1 Node 1 - REMOVE augue -> Result magna
1903 Client 1 Delay: 0.858809116544933 seconds
1904 Node 2 Updated Remove! -> Key nascetur
1905 Node 3 Updated Remove! -> Key nascetur
1906 Node 1 GET -> Key dictum
1907 Client 0 Node 1 - GET dictum -> Result NULL --> Expected NULL
1908 Node 2 GET -> Key dictum
1909 Client 0 Node 2 - GET dictum -> Result sem --> Expected NULL
1910 Node 3 GET -> Key dictum
1911 Client 0 Node 3 - GET dictum -> Result sem --> Expected NULL
1912
1913 Node 1 Remove! -> Key est
1914 Client 0 Node 1 - REMOVE est -> Result at
1915 Client 0 Delay: 0.9096113404305797 seconds
1916 Node 1 GET -> Key augue
1917 Client 1 Node 1 - GET augue -> Result NULL --> Expected NULL
1918 Node 2 GET -> Key augue
1919 Client 1 Node 2 - GET augue -> Result magna --> Expected NULL
1920 Node 3 GET -> Key augue
1921 Client 1 Node 3 - GET augue -> Result magna --> Expected NULL
```

File - driver

```
1922
1923 Node 1 Remove! -> Key dictum
1924 Client 1 Node 1 - REMOVE dictum -> Result NULL
1925 Client 1 Delay: 0.5785488703248602 seconds
1926 Node 2 Updated Remove! -> Key Pellentesque
1927 Node 3 Updated Remove! -> Key Pellentesque
1928 Node 1 GET -> Key est
1929 Client 0 Node 1 - GET est -> Result NULL --> Expected NULL
1930 Node 2 GET -> Key est
1931 Client 0 Node 2 - GET est -> Result at --> Expected NULL
1932 Node 3 GET -> Key est
1933 Client 0 Node 3 - GET est -> Result at --> Expected NULL
1934
1935 Node 1 Remove! -> Key ac
1936 Client 0 Node 1 - REMOVE ac -> Result id
1937 Client 0 Delay: 0.6005789772457848 seconds
1938 Node 2 Updated Remove! -> Key scelerisque
1939 Node 3 Updated Remove! -> Key scelerisque
1940 Node 1 GET -> Key dictum
1941 Client 1 Node 1 - GET dictum -> Result NULL --> Expected NULL
1942 Node 2 GET -> Key dictum
1943 Client 1 Node 2 - GET dictum -> Result sem --> Expected NULL
1944 Node 3 GET -> Key dictum
1945 Client 1 Node 3 - GET dictum -> Result sem --> Expected NULL
1946
1947 Node 1 Remove! -> Key eget
1948 Client 1 Node 1 - REMOVE eget -> Result lectus
1949 Client 1 Delay: 1.0853778338885522 seconds
1950 Node 1 GET -> Key ac
1951 Client 0 Node 1 - GET ac -> Result NULL --> Expected NULL
1952 Node 2 GET -> Key ac
1953 Client 0 Node 2 - GET ac -> Result id --> Expected NULL
1954 Node 3 GET -> Key ac
1955 Client 0 Node 3 - GET ac -> Result id --> Expected NULL
1956
1957 Node 1 Remove! -> Key Maecenas
1958 Client 0 Node 1 - REMOVE Maecenas -> Result Suspendisse
1959 Client 0 Delay: 0.7643015119134938 seconds
1960 Node 2 Updated Remove! -> Key mus
1961 Node 3 Updated Remove! -> Key mus
1962 Node 1 GET -> Key eget
1963 Client 1 Node 1 - GET eget -> Result NULL --> Expected NULL
1964 Node 2 GET -> Key eget
1965 Client 1 Node 2 - GET eget -> Result lectus --> Expected NULL
1966 Node 3 GET -> Key eget
1967 Client 1 Node 3 - GET eget -> Result lectus --> Expected NULL
1968
1969 Node 1 Remove! -> Key molestie
1970 Client 1 Node 1 - REMOVE molestie -> Result lorem
1971 Client 1 Delay: 1.037660454779669 seconds
1972 Node 1 GET -> Key Maecenas
1973 Client 0 Node 1 - GET Maecenas -> Result NULL --> Expected NULL
1974 Node 2 GET -> Key Maecenas
1975 Client 0 Node 2 - GET Maecenas -> Result Suspendisse --> Expected NULL
1976 Node 3 GET -> Key Maecenas
1977 Client 0 Node 3 - GET Maecenas -> Result Suspendisse --> Expected NULL
1978
1979 Node 1 Remove! -> Key vitae
1980 Client 0 Node 1 - REMOVE vitae -> Result mauris
1981 Client 0 Delay: 0.7992784657259318 seconds
1982 Node 2 Updated Remove! -> Key fringilla
1983 Node 3 Updated Remove! -> Key fringilla
```

File - driver

```
1984 Node 2 Updated Remove! -> Key metus
1985 Node 3 Updated Remove! -> Key metus
1986 Node 1 GET -> Key vitae
1987 Client 0 Node 1 - GET vitae -> Result NULL --> Expected NULL
1988 Node 2 GET -> Key vitae
1989 Client 0 Node 2 - GET vitae -> Result mauris --> Expected NULL
1990 Node 3 GET -> Key vitae
1991 Client 0 Node 3 - GET vitae -> Result mauris --> Expected NULL
1992
1993 Node 1 Remove! -> Key leo
1994 Client 0 Node 1 - REMOVE leo -> Result in
1995 Client 0 Delay: 0.9677450906454595 seconds
1996 Node 1 GET -> Key molestie
1997 Client 1 Node 1 - GET molestie -> Result NULL --> Expected NULL
1998 Node 2 GET -> Key molestie
1999 Client 1 Node 2 - GET molestie -> Result lorem --> Expected NULL
2000 Node 3 GET -> Key molestie
2001 Client 1 Node 3 - GET molestie -> Result lorem --> Expected NULL
2002
2003 Node 1 Remove! -> Key Nam
2004 Client 1 Node 1 - REMOVE Nam -> Result sit
2005 Client 1 Delay: 0.6694339860740033 seconds
2006 Node 2 Updated Remove! -> Key massa
2007 Node 3 Updated Remove! -> Key massa
2008 Node 1 GET -> Key Nam
2009 Client 1 Node 1 - GET Nam -> Result NULL --> Expected NULL
2010 Node 2 GET -> Key Nam
2011 Client 1 Node 2 - GET Nam -> Result sit --> Expected NULL
2012 Node 3 GET -> Key Nam
2013 Client 1 Node 3 - GET Nam -> Result sit --> Expected NULL
2014
2015 Node 1 GET -> Key leo
2016 Client 0 Node 1 - GET leo -> Result NULL --> Expected NULL
2017 Node 2 GET -> Key leo
2018 Client 0 Node 2 - GET leo -> Result in --> Expected NULL
2019 Node 3 GET -> Key leo
2020 Client 0 Node 3 - GET leo -> Result in --> Expected NULL
2021
2022 Node 1 Remove! -> Key iaculis
2023 Client 0 Node 1 - REMOVE iaculis -> Result pharetra
2024 Client 0 Delay: 0.8895620580369292 seconds
2025 Node 2 Updated Remove! -> Key ut
2026 Node 3 Updated Remove! -> Key ut
2027 Node 2 Updated Remove! -> Key dictum
2028 Node 3 Updated Remove! -> Key dictum
2029 Node 1 GET -> Key iaculis
2030 Client 0 Node 1 - GET iaculis -> Result NULL --> Expected NULL
2031 Node 2 GET -> Key iaculis
2032 Client 0 Node 2 - GET iaculis -> Result pharetra --> Expected NULL
2033 Node 3 GET -> Key iaculis
2034 Client 0 Node 3 - GET iaculis -> Result pharetra --> Expected NULL
2035
2036 Node 1 Remove! -> Key ultrices
2037 Client 0 Node 1 - REMOVE ultrices -> Result Suspendisse
2038 Client 0 Delay: 0.7990368079195243 seconds
2039 Node 2 Updated Remove! -> Key augue
2040 Node 3 Updated Remove! -> Key augue
2041 Node 1 GET -> Key ultrices
2042 Client 0 Node 1 - GET ultrices -> Result NULL --> Expected NULL
2043 Node 2 GET -> Key ultrices
2044 Client 0 Node 2 - GET ultrices -> Result Suspendisse --> Expected NULL
2045 Node 3 GET -> Key ultrices
```

File - driver

```
2046 Client 0 Node 3 - GET ultrices -> Result Suspendisse --> Expected NULL
2047
2048 Node 1 Remove! -> Key tellus
2049 Client 0 Node 1 - REMOVE tellus -> Result est
2050 Client 0 Delay: 1.0261575216610304 seconds
2051 Node 2 Updated Remove! -> Key est
2052 Node 3 Updated Remove! -> Key est
2053 Node 2 Updated Remove! -> Key ac
2054 Node 3 Updated Remove! -> Key ac
2055 Node 1 GET -> Key tellus
2056 Client 0 Node 1 - GET tellus -> Result NULL --> Expected NULL
2057 Node 2 GET -> Key tellus
2058 Client 0 Node 2 - GET tellus -> Result est --> Expected NULL
2059 Node 3 GET -> Key tellus
2060 Client 0 Node 3 - GET tellus -> Result est --> Expected NULL
2061
2062 Node 1 Remove! -> Key nibh
2063 Client 0 Node 1 - REMOVE nibh -> Result fermentum
2064 Client 0 Delay: 1.0718984354491419 seconds
2065 Node 2 Updated Remove! -> Key eget
2066 Node 3 Updated Remove! -> Key eget
2067 Node 1 GET -> Key nibh
2068 Client 0 Node 1 - GET nibh -> Result NULL --> Expected NULL
2069 Node 2 GET -> Key nibh
2070 Client 0 Node 2 - GET nibh -> Result fermentum --> Expected NULL
2071 Node 3 GET -> Key nibh
2072 Client 0 Node 3 - GET nibh -> Result fermentum --> Expected NULL
2073
2074 Node 1 Remove! -> Key eleifend
2075 Client 0 Node 1 - REMOVE eleifend -> Result cursus
2076 Client 0 Delay: 0.92505223162833 seconds
2077 Node 2 Updated Remove! -> Key Maecenas
2078 Node 3 Updated Remove! -> Key Maecenas
2079 Node 2 Updated Remove! -> Key molestie
2080 Node 3 Updated Remove! -> Key molestie
2081 Node 1 GET -> Key eleifend
2082 Client 0 Node 1 - GET eleifend -> Result NULL --> Expected NULL
2083 Node 2 GET -> Key eleifend
2084 Client 0 Node 2 - GET eleifend -> Result cursus --> Expected NULL
2085 Node 3 GET -> Key eleifend
2086 Client 0 Node 3 - GET eleifend -> Result cursus --> Expected NULL
2087
2088 Node 1 Remove! -> Key Suspendisse
2089 Client 0 Node 1 - REMOVE Suspendisse -> Result NULL
2090 Client 0 Delay: 1.0038004300701386 seconds
2091 Node 2 Updated Remove! -> Key vitae
2092 Node 3 Updated Remove! -> Key vitae
2093 Node 1 GET -> Key Suspendisse
2094 Client 0 Node 1 - GET Suspendisse -> Result NULL --> Expected NULL
2095 Node 2 GET -> Key Suspendisse
2096 Client 0 Node 2 - GET Suspendisse -> Result NULL --> Expected NULL
2097 Node 3 GET -> Key Suspendisse
2098 Client 0 Node 3 - GET Suspendisse -> Result NULL --> Expected NULL
2099
2100 Node 1 Remove! -> Key ut
2101 Client 0 Node 1 - REMOVE ut -> Result NULL
2102 Client 0 Delay: 0.8608899443815916 seconds
2103 Node 2 Updated Remove! -> Key leo
2104 Node 3 Updated Remove! -> Key leo
2105 Node 1 GET -> Key ut
2106 Client 0 Node 1 - GET ut -> Result NULL --> Expected NULL
2107 Node 2 GET -> Key ut
```

File - driver

```
2108 Client 0 Node 2 - GET ut -> Result NULL --> Expected NULL
2109 Node 3 GET -> Key ut
2110 Client 0 Node 3 - GET ut -> Result NULL --> Expected NULL
2111
2112 Node 1 Remove! -> Key venenatis
2113 Client 0 Node 1 - REMOVE venenatis -> Result orci
2114 Client 0 Delay: 1.1185598694821834 seconds
2115 Node 2 Updated Remove! -> Key Nam
2116 Node 3 Updated Remove! -> Key Nam
2117 Node 2 Updated Remove! -> Key iaculis
2118 Node 3 Updated Remove! -> Key iaculis
2119 Node 1 GET -> Key venenatis
2120 Client 0 Node 1 - GET venenatis -> Result NULL --> Expected NULL
2121 Node 2 GET -> Key venenatis
2122 Client 0 Node 2 - GET venenatis -> Result orci --> Expected NULL
2123 Node 3 GET -> Key venenatis
2124 Client 0 Node 3 - GET venenatis -> Result orci --> Expected NULL
2125
2126 Node 1 Remove! -> Key Nunc
2127 Client 0 Node 1 - REMOVE Nunc -> Result NULL
2128 Client 0 Delay: 0.7300228015546059 seconds
2129 Node 2 Updated Remove! -> Key ultrices
2130 Node 3 Updated Remove! -> Key ultrices
2131 Node 2 Updated Remove! -> Key tellus
2132 Node 3 Updated Remove! -> Key tellus
2133 Node 1 GET -> Key Nunc
2134 Client 0 Node 1 - GET Nunc -> Result NULL --> Expected NULL
2135 Node 2 GET -> Key Nunc
2136 Client 0 Node 2 - GET Nunc -> Result NULL --> Expected NULL
2137 Node 3 GET -> Key Nunc
2138 Client 0 Node 3 - GET Nunc -> Result NULL --> Expected NULL
2139
2140 Killed Client 1 with sequential consistency
2141 Killed Client 2 with sequential consistency
2142 Killed KV Node 1 with sequential consistency...
2143 Killed KV Node 2 with sequential consistency...
2144 Killed KV Node 3 with sequential consistency...
2145
2146 Process finished with exit code 0
2147
```