

Outlab 1 - CSCI 232

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Due: 11pm, February 14, 2021

```
~/Downloads/algs4> javac Job.java
~/Downloads/algs4> javac JobSche
JobScheduler.class  JobScheduler.java
~/Downloads/algs4> javac JobScheduler.java
Note: JobScheduler.java uses unchecked or unsafe operations.
Note: Recompile with -Xlint:unchecked for details.
~/Downloads/algs4> javac JobPrio
JobPriorityQueue.class  JobPriorityQueue.java
~/Downloads/algs4> javac JobPriorityQueue.java
~/Downloads/algs4> java JobScheduler input
input.txt  input2.txt  input3.txt
~/Downloads/algs4> java JobScheduler input.txt 1 > outputOutlab1a.txt
~/Downloads/algs4> java JobScheduler input.txt 2 > outputOutlab1a.txt
bash: outputOutlab1a.txt: cannot overwrite existing file
~/Downloads/algs4> java JobScheduler input.txt 2 > outputOutlab1b.txt
~/Downloads/algs4> java JobScheduler input2.txt 1 > outputOutlab1c.txt
~/Downloads/algs4> java JobScheduler input2.txt 2 > outputOutlab1d.txt
~/Downloads/algs4> 
```

Output 1a

```
| => cat outputOutlab1c.txt
```

Second by second output for a Job Scheduler. If a job is completed, tr

Number of jobs: 2

```
Current second: 0    | Queue Idle
Current second: 1    | Queue Idle
Current second: 2    | Queue Idle
Current second: 3    | Queue Idle
Current second: 4    | Queue Idle
Current second: 5    | Core: 1  |Current job number: 1  |
Current second: 6    | Core: 1  |Current job number: 1  |
Current second: 7    | Core: 1  |Current job number: 1  |
Current second: 8    | Core: 1  |Current job number: 2  |
Current second: 9    | Core: 1  |Current job number: 2  |
Current second: 10   | Core: 1  |Current job number: 2  |
Current second: 11   | Core: 1  |Current job number: 2  |
Current second: 12   | Core: 1  |Current job number: 2  |
```

Current second: 13 | Core: 1 | Current job number: 2 |

Completed job 2

Current second: 14 | Core: 1 | Current job number: 2 |

Current second: 15 | Core: 1 | Current job number: 1 |

Completed job 1

Current second: 16 | Core: 1 | Current job number: 1 |

Statistics:

Job number: 2 | Wait time: 0 | Execution time: 7 |

Job number: 1 | Wait time: 0 | Execution time: 12 |

Average wait time: 0.0

Average execution time: 9.5

Output 1b Multi-threaded

| => cat outputOutlab1d.txt

Second by second output for a Job Scheduler. If a job is completed, tr

Number of jobs: 2

Current second: 0 | Queue Idle
 Current second: 1 | Queue Idle
 Current second: 2 | Queue Idle
 Current second: 3 | Queue Idle
 Current second: 4 | Queue Idle
 Current second: 5 | Core: 1 | Current job number: 1 |
 Current second: 5 | Core: 2 | Core Idle
 Current second: 6 | Core: 1 | Current job number: 1 |
 Current second: 6 | Core: 2 | Core Idle
 Current second: 7 | Core: 1 | Current job number: 1 |
 Current second: 7 | Core: 2 | Core Idle
 Current second: 8 | Core: 1 | Current job number: 2 |
 Current second: 8 | Core: 2 | Current job number: 1 |
 Current second: 9 | Core: 1 | Current job number: 2 |
 Completed job 1
 Current second: 9 | Core: 2 | Current job number: 1 |
 Current second: 10 | Core: 1 | Current job number: 2 |
 Current second: 10 | Core: 2 | Core Idle
 Current second: 11 | Core: 1 | Current job number: 2 |
 Current second: 11 | Core: 2 | Core Idle
 Current second: 12 | Core: 1 | Current job number: 2 |
 Current second: 12 | Core: 2 | Core Idle
 Current second: 13 | Core: 1 | Current job number: 2 |
 Current second: 13 | Core: 2 | Core Idle

Completed job 2

Current second: 14 | Core: 1 | Current job number: 2 |

Current second: 14 | Core: 2 | Core Idle

Statistics:

Job number: 1 | Wait time: 0 | Execution time: 5 |

Job number: 2 | Wait time: 0 | Execution time: 7 |

Average wait time: 0.0

Average execution time: 6.0

Output 1c Single Threaded

Second by second output for a Job Scheduler. If a job is completed, th

Number of jobs: 8

Current second: 0 | Queue Idle

Current second: 1 | Queue Idle

Current second: 2 | Queue Idle

Current second: 3 | Queue Idle

Current second: 4 | Queue Idle

Current second: 5 | Core: 1 | Current job number: 8 |

Current second: 6 | Core: 1 | Current job number: 8 |

Current second: 7 | Core: 1 | Current job number: 8 |

Current second: 8 | Core: 1 | Current job number: 8 |

Current second: 9 | Core: 1 | Current job number: 8 |

Current second: 10 | Core: 1 | Current job number: 2 |

Current second: 11 | Core: 1 | Current job number: 2 |

Current second: 12 | Core: 1 | Current job number: 2 |

Current second: 13 | Core: 1 | Current job number: 2 |

Current second: 14 | Core: 1 | Current job number: 2 |

Current second: 15 | Core: 1 | Current job number: 2 |

Current second: 16 | Core: 1 | Current job number: 2 |

Current second: 17 | Core: 1 | Current job number: 2 |

Current second: 18 | Core: 1 | Current job number: 2 |

Current second: 19 | Core: 1 | Current job number: 2 |

Current second: 20 | Core: 1 | Current job number: 2 |

Current second: 21 | Core: 1 | Current job number: 2 |

Current second: 22 | Core: 1 | Current job number: 2 |

Current second: 23 | Core: 1 | Current job number: 2 |

Completed job 2

Current second: 24 | Core: 1 | Current job number: 2 |

Current second: 25 | Core: 1 | Current job number: 7 |

Current second: 26 | Core: 1 | Current job number: 7 |

Current second: 27 | Core: 1 | Current job number: 7 |

Current second: 28 | Core: 1 | Current job number: 7 |

Current second: 29 | Core: 1 | Current job number: 7 |

Current second: 30 | Core: 1 | Current job number: 7 |

Current second: 31	Core: 1	Current job number: 7	
Current second: 32	Core: 1	Current job number: 7	
Current second: 33	Core: 1	Current job number: 7	
Current second: 34	Core: 1	Current job number: 7	
Current second: 35	Core: 1	Current job number: 7	
Current second: 36	Core: 1	Current job number: 7	
Current second: 37	Core: 1	Current job number: 7	
Current second: 38	Core: 1	Current job number: 7	
Current second: 39	Core: 1	Current job number: 7	
Current second: 40	Core: 1	Current job number: 7	
Current second: 41	Core: 1	Current job number: 7	
Current second: 42	Core: 1	Current job number: 7	
Current second: 43	Core: 1	Current job number: 7	
Current second: 44	Core: 1	Current job number: 7	
Current second: 45	Core: 1	Current job number: 7	
Current second: 46	Core: 1	Current job number: 7	
Current second: 47	Core: 1	Current job number: 7	
Current second: 48	Core: 1	Current job number: 7	
Current second: 49	Core: 1	Current job number: 7	
Current second: 50	Core: 1	Current job number: 7	
Current second: 51	Core: 1	Current job number: 7	
Current second: 52	Core: 1	Current job number: 7	
Current second: 53	Core: 1	Current job number: 7	
Current second: 54	Core: 1	Current job number: 7	
Current second: 55	Core: 1	Current job number: 7	
Current second: 56	Core: 1	Current job number: 7	
Current second: 57	Core: 1	Current job number: 7	
Current second: 58	Core: 1	Current job number: 7	
Current second: 59	Core: 1	Current job number: 7	
Current second: 60	Core: 1	Current job number: 7	
Completed job 7			
Current second: 61	Core: 1	Current job number: 7	
Current second: 62	Core: 1	Current job number: 6	
Current second: 63	Core: 1	Current job number: 6	
Current second: 64	Core: 1	Current job number: 6	
Completed job 6			
Current second: 65	Core: 1	Current job number: 6	
Current second: 66	Core: 1	Current job number: 8	
Current second: 67	Core: 1	Current job number: 8	
Current second: 68	Core: 1	Current job number: 8	
Current second: 69	Core: 1	Current job number: 8	
Current second: 70	Core: 1	Current job number: 8	
Current second: 71	Core: 1	Current job number: 8	
Current second: 72	Core: 1	Current job number: 8	
Current second: 73	Core: 1	Current job number: 8	
Current second: 74	Core: 1	Current job number: 8	
Current second: 75	Core: 1	Current job number: 8	
Current second: 76	Core: 1	Current job number: 8	
Current second: 77	Core: 1	Current job number: 8	
Current second: 78	Core: 1	Current job number: 8	

Current second: 79	Core: 1	Current job number: 8	
Current second: 80	Core: 1	Current job number: 8	
Current second: 81	Core: 1	Current job number: 8	
Current second: 82	Core: 1	Current job number: 8	
Current second: 83	Core: 1	Current job number: 8	
Current second: 84	Core: 1	Current job number: 8	
Current second: 85	Core: 1	Current job number: 8	
Current second: 86	Core: 1	Current job number: 8	
Current second: 87	Core: 1	Current job number: 8	
Current second: 88	Core: 1	Current job number: 8	
Current second: 89	Core: 1	Current job number: 8	
Current second: 90	Core: 1	Current job number: 8	
Current second: 91	Core: 1	Current job number: 8	
Current second: 92	Core: 1	Current job number: 8	
Current second: 93	Core: 1	Current job number: 8	
Current second: 94	Core: 1	Current job number: 8	
Current second: 95	Core: 1	Current job number: 8	
Current second: 96	Core: 1	Current job number: 8	
Current second: 97	Core: 1	Current job number: 8	
Current second: 98	Core: 1	Current job number: 8	
Current second: 99	Core: 1	Current job number: 8	
Current second: 100	Core: 1	Current job number: 8	
Current second: 101	Core: 1	Current job number: 8	
Current second: 102	Core: 1	Current job number: 8	
Current second: 103	Core: 1	Current job number: 8	
Current second: 104	Core: 1	Current job number: 8	
Current second: 105	Core: 1	Current job number: 8	
Current second: 106	Core: 1	Current job number: 8	
Current second: 107	Core: 1	Current job number: 8	
Current second: 108	Core: 1	Current job number: 8	
Current second: 109	Core: 1	Current job number: 8	
Current second: 110	Core: 1	Current job number: 8	
Current second: 111	Core: 1	Current job number: 8	
Current second: 112	Core: 1	Current job number: 8	
Current second: 113	Core: 1	Current job number: 8	
Current second: 114	Core: 1	Current job number: 8	
Current second: 115	Core: 1	Current job number: 8	
Current second: 116	Core: 1	Current job number: 8	
Current second: 117	Core: 1	Current job number: 8	
Current second: 118	Core: 1	Current job number: 8	
Current second: 119	Core: 1	Current job number: 8	
Current second: 120	Core: 1	Current job number: 8	
Current second: 121	Core: 1	Current job number: 8	
Current second: 122	Core: 1	Current job number: 8	
Current second: 123	Core: 1	Current job number: 8	
Current second: 124	Core: 1	Current job number: 8	
Current second: 125	Core: 1	Current job number: 8	
Current second: 126	Core: 1	Current job number: 8	
Current second: 127	Core: 1	Current job number: 8	
Current second: 128	Core: 1	Current job number: 8	

```
Current second: 129 | Core: 1 | Current job number: 8 |
Current second: 130 | Core: 1 | Current job number: 8 |
Current second: 131 | Core: 1 | Current job number: 8 |
Current second: 132 | Core: 1 | Current job number: 8 |
Current second: 133 | Core: 1 | Current job number: 8 |
Current second: 134 | Core: 1 | Current job number: 8 |
Current second: 135 | Core: 1 | Current job number: 8 |
Current second: 136 | Core: 1 | Current job number: 8 |
Current second: 137 | Core: 1 | Current job number: 8 |
Current second: 138 | Core: 1 | Current job number: 8 |
Current second: 139 | Core: 1 | Current job number: 8 |
Current second: 140 | Core: 1 | Current job number: 8 |
Current second: 141 | Core: 1 | Current job number: 8 |
Current second: 142 | Core: 1 | Current job number: 8 |
Current second: 143 | Core: 1 | Current job number: 8 |
Current second: 144 | Core: 1 | Current job number: 8 |
Current second: 145 | Core: 1 | Current job number: 8 |
Current second: 146 | Core: 1 | Current job number: 8 |
Current second: 147 | Core: 1 | Current job number: 8 |
Current second: 148 | Core: 1 | Current job number: 8 |
Current second: 149 | Core: 1 | Current job number: 8 |
Current second: 150 | Core: 1 | Current job number: 8 |
Current second: 151 | Core: 1 | Current job number: 8 |
Current second: 152 | Core: 1 | Current job number: 8 |
Current second: 153 | Core: 1 | Current job number: 8 |
Current second: 154 | Core: 1 | Current job number: 8 |
Current second: 155 | Core: 1 | Current job number: 8 |
Current second: 156 | Core: 1 | Current job number: 8 |
Current second: 157 | Core: 1 | Current job number: 8 |
Current second: 158 | Core: 1 | Current job number: 8 |
Current second: 159 | Core: 1 | Current job number: 8 |
Completed job 8
Current second: 160 | Core: 1 | Current job number: 8 |
Current second: 161 | Core: 1 | Current job number: 3 |
Current second: 162 | Core: 1 | Current job number: 3 |
Current second: 163 | Core: 1 | Current job number: 3 |
Current second: 164 | Core: 1 | Current job number: 3 |
Current second: 165 | Core: 1 | Current job number: 3 |
Current second: 166 | Core: 1 | Current job number: 3 |
Current second: 167 | Core: 1 | Current job number: 3 |
Completed job 3
Current second: 168 | Core: 1 | Current job number: 3 |
Current second: 169 | Core: 1 | Current job number: 1 |
Current second: 170 | Core: 1 | Current job number: 1 |
Current second: 171 | Core: 1 | Current job number: 1 |
Current second: 172 | Core: 1 | Current job number: 1 |
Current second: 173 | Core: 1 | Current job number: 1 |
Current second: 174 | Core: 1 | Current job number: 1 |
Current second: 175 | Core: 1 | Current job number: 1 |
Current second: 176 | Core: 1 | Current job number: 1 |
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Current second: 177	Core: 1	Current job number: 1	
Current second: 178	Core: 1	Current job number: 1	
Current second: 179	Core: 1	Current job number: 1	
Current second: 180	Core: 1	Current job number: 1	
Current second: 181	Core: 1	Current job number: 1	
Current second: 182	Core: 1	Current job number: 1	
Current second: 183	Core: 1	Current job number: 1	
Current second: 184	Core: 1	Current job number: 1	
Current second: 185	Core: 1	Current job number: 1	
Current second: 186	Core: 1	Current job number: 1	
Current second: 187	Core: 1	Current job number: 1	
Current second: 188	Core: 1	Current job number: 1	
Current second: 189	Core: 1	Current job number: 1	
Current second: 190	Core: 1	Current job number: 1	
Current second: 191	Core: 1	Current job number: 1	
Current second: 192	Core: 1	Current job number: 1	
Current second: 193	Core: 1	Current job number: 1	
Current second: 194	Core: 1	Current job number: 1	
Current second: 195	Core: 1	Current job number: 1	
Current second: 196	Core: 1	Current job number: 1	
Current second: 197	Core: 1	Current job number: 1	
Current second: 198	Core: 1	Current job number: 1	
Current second: 199	Core: 1	Current job number: 1	
Current second: 200	Core: 1	Current job number: 1	
Current second: 201	Core: 1	Current job number: 1	
Current second: 202	Core: 1	Current job number: 1	
Current second: 203	Core: 1	Current job number: 1	
Current second: 204	Core: 1	Current job number: 1	
Current second: 205	Core: 1	Current job number: 1	
Current second: 206	Core: 1	Current job number: 1	
Current second: 207	Core: 1	Current job number: 1	
Current second: 208	Core: 1	Current job number: 1	
Current second: 209	Core: 1	Current job number: 1	
Current second: 210	Core: 1	Current job number: 1	
Current second: 211	Core: 1	Current job number: 1	
Current second: 212	Core: 1	Current job number: 1	
Current second: 213	Core: 1	Current job number: 1	
Current second: 214	Core: 1	Current job number: 1	
Current second: 215	Core: 1	Current job number: 1	
Current second: 216	Core: 1	Current job number: 1	
Current second: 217	Core: 1	Current job number: 1	
Current second: 218	Core: 1	Current job number: 1	
Current second: 219	Core: 1	Current job number: 1	
Current second: 220	Core: 1	Current job number: 1	
Current second: 221	Core: 1	Current job number: 1	
Current second: 222	Core: 1	Current job number: 1	
Current second: 223	Core: 1	Current job number: 1	
Current second: 224	Core: 1	Current job number: 1	
Current second: 225	Core: 1	Current job number: 1	
Current second: 226	Core: 1	Current job number: 1	

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Current second: 227 | Core: 1 | Current job number: 1 |
Current second: 228 | Core: 1 | Current job number: 1 |
Current second: 229 | Core: 1 | Current job number: 1 |
Current second: 230 | Core: 1 | Current job number: 1 |
Current second: 231 | Core: 1 | Current job number: 1 |
Current second: 232 | Core: 1 | Current job number: 1 |
Current second: 233 | Core: 1 | Current job number: 1 |
Current second: 234 | Core: 1 | Current job number: 1 |
Current second: 235 | Core: 1 | Current job number: 1 |
Current second: 236 | Core: 1 | Current job number: 1 |
Current second: 237 | Core: 1 | Current job number: 1 |
Current second: 238 | Core: 1 | Current job number: 1 |
Current second: 239 | Core: 1 | Current job number: 1 |
Current second: 240 | Core: 1 | Current job number: 1 |
Current second: 241 | Core: 1 | Current job number: 1 |
Current second: 242 | Core: 1 | Current job number: 1 |
Current second: 243 | Core: 1 | Current job number: 1 |
Current second: 244 | Core: 1 | Current job number: 1 |
Current second: 245 | Core: 1 | Current job number: 1 |
Current second: 246 | Core: 1 | Current job number: 1 |
Current second: 247 | Core: 1 | Current job number: 1 |
Current second: 248 | Core: 1 | Current job number: 1 |
Current second: 249 | Core: 1 | Current job number: 1 |
Current second: 250 | Core: 1 | Current job number: 1 |
Current second: 251 | Core: 1 | Current job number: 1 |
Current second: 252 | Core: 1 | Current job number: 1 |
Current second: 253 | Core: 1 | Current job number: 1 |
Current second: 254 | Core: 1 | Current job number: 1 |
Current second: 255 | Core: 1 | Current job number: 1 |
Current second: 256 | Core: 1 | Current job number: 1 |
Current second: 257 | Core: 1 | Current job number: 1 |
Current second: 258 | Core: 1 | Current job number: 1 |
Current second: 259 | Core: 1 | Current job number: 1 |
Current second: 260 | Core: 1 | Current job number: 1 |
Current second: 261 | Core: 1 | Current job number: 1 |
Current second: 262 | Core: 1 | Current job number: 1 |
Current second: 263 | Core: 1 | Current job number: 1 |
Current second: 264 | Core: 1 | Current job number: 1 |
Current second: 265 | Core: 1 | Current job number: 1 |
Current second: 266 | Core: 1 | Current job number: 1 |
Current second: 267 | Core: 1 | Current job number: 1 |
Completed job 1
Current second: 268 | Core: 1 | Current job number: 1 |
Current second: 269 | Core: 1 | Current job number: 5 |
Current second: 270 | Core: 1 | Current job number: 5 |
Current second: 271 | Core: 1 | Current job number: 5 |
Current second: 272 | Core: 1 | Current job number: 5 |
Current second: 273 | Core: 1 | Current job number: 5 |
Current second: 274 | Core: 1 | Current job number: 5 |
Current second: 275 | Core: 1 | Current job number: 5 |
```



```
Current second: 276 | Core: 1 | Current job number: 5 |
Current second: 277 | Core: 1 | Current job number: 5 |
Current second: 278 | Core: 1 | Current job number: 5 |
Current second: 279 | Core: 1 | Current job number: 5 |
Current second: 280 | Core: 1 | Current job number: 5 |
Current second: 281 | Core: 1 | Current job number: 5 |
Current second: 282 | Core: 1 | Current job number: 5 |
Current second: 283 | Core: 1 | Current job number: 5 |
Current second: 284 | Core: 1 | Current job number: 5 |
Current second: 285 | Core: 1 | Current job number: 5 |
Current second: 286 | Core: 1 | Current job number: 5 |
Current second: 287 | Core: 1 | Current job number: 5 |
Current second: 288 | Core: 1 | Current job number: 5 |
Current second: 289 | Core: 1 | Current job number: 5 |
Current second: 290 | Core: 1 | Current job number: 5 |
Current second: 291 | Core: 1 | Current job number: 5 |
Current second: 292 | Core: 1 | Current job number: 5 |
Current second: 293 | Core: 1 | Current job number: 5 |
Current second: 294 | Core: 1 | Current job number: 5 |
Current second: 295 | Core: 1 | Current job number: 5 |
Current second: 296 | Core: 1 | Current job number: 5 |
Current second: 297 | Core: 1 | Current job number: 5 |
Current second: 298 | Core: 1 | Current job number: 5 |
Current second: 299 | Core: 1 | Current job number: 5 |
Current second: 300 | Core: 1 | Current job number: 5 |
Current second: 301 | Core: 1 | Current job number: 5 |
Current second: 302 | Core: 1 | Current job number: 5 |
Current second: 303 | Core: 1 | Current job number: 5 |
Current second: 304 | Core: 1 | Current job number: 5 |
Current second: 305 | Core: 1 | Current job number: 5 |
Current second: 306 | Core: 1 | Current job number: 5 |
Current second: 307 | Core: 1 | Current job number: 5 |
Current second: 308 | Core: 1 | Current job number: 5 |
Current second: 309 | Core: 1 | Current job number: 5 |
Current second: 310 | Core: 1 | Current job number: 5 |
Current second: 311 | Core: 1 | Current job number: 5 |
Current second: 312 | Core: 1 | Current job number: 5 |
Current second: 313 | Core: 1 | Current job number: 5 |
Current second: 314 | Core: 1 | Current job number: 5 |
Current second: 315 | Core: 1 | Current job number: 5 |
Current second: 316 | Core: 1 | Current job number: 5 |
Current second: 317 | Core: 1 | Current job number: 5 |
Completed job 5
Current second: 318 | Core: 1 | Current job number: 5 |
Current second: 319 | Core: 1 | Current job number: 4 |
Current second: 320 | Core: 1 | Current job number: 4 |
Current second: 321 | Core: 1 | Current job number: 4 |
Current second: 322 | Core: 1 | Current job number: 4 |
Current second: 323 | Core: 1 | Current job number: 4 |
Current second: 324 | Core: 1 | Current job number: 4 |
```

```

Current second: 325 | Core: 1 |Current job number: 4 |
Current second: 326 | Core: 1 |Current job number: 4 |
Current second: 327 | Core: 1 |Current job number: 4 |
Current second: 328 | Core: 1 |Current job number: 4 |
Completed job 4
Current second: 329 | Core: 1 |Current job number: 4 |

```

Statistics:

```

Job number: 2 | Wait time: 0 | Execution time: 15 |
Job number: 7 | Wait time: 4 | Execution time: 37 |
Job number: 6 | Wait time: 32 | Execution time: 4 |
Job number: 8 | Wait time: 0 | Execution time: 156 |
Job number: 3 | Wait time: 154 | Execution time: 8 |
Job number: 1 | Wait time: 159 | Execution time: 100 |
Job number: 5 | Wait time: 249 | Execution time: 50 |
Job number: 4 | Wait time: 310 | Execution time: 11 |

```

Average wait time: 113.5

Average execution time: 47.6

Output 1d Multi Threaded

Second by second output for a Job Scheduler. If a job is completed, the

Number of jobs: 8

```

Current second: 0 | Queue Idle
Current second: 1 | Queue Idle
Current second: 2 | Queue Idle
Current second: 3 | Queue Idle
Current second: 4 | Queue Idle
Current second: 5 | Core: 1 |Current job number: 8 |
Current second: 5 | Core: 2 |Core Idle
Current second: 6 | Core: 1 |Current job number: 8 |
Current second: 6 | Core: 2 |Core Idle
Current second: 7 | Core: 1 |Current job number: 8 |
Current second: 7 | Core: 2 |Current job number: 3 |
Current second: 8 | Core: 1 |Current job number: 8 |
Current second: 8 | Core: 2 |Current job number: 3 |
Current second: 9 | Core: 1 |Current job number: 8 |
Current second: 9 | Core: 2 |Current job number: 3 |
Current second: 10 | Core: 1 |Current job number: 2 |
Current second: 10 | Core: 2 |Current job number: 8 |
Current second: 11 | Core: 1 |Current job number: 2 |
Current second: 11 | Core: 2 |Current job number: 8 |
Current second: 12 | Core: 1 |Current job number: 2 |
Current second: 12 | Core: 2 |Current job number: 8 |
Current second: 13 | Core: 1 |Current job number: 2 |
Current second: 13 | Core: 2 |Current job number: 8 |

```

```
Current second: 14 | Core: 1 | Current job number: 2 |
Current second: 14 | Core: 2 | Current job number: 8 |
Current second: 15 | Core: 1 | Current job number: 2 |
Current second: 15 | Core: 2 | Current job number: 8 |
Current second: 16 | Core: 1 | Current job number: 2 |
Current second: 16 | Core: 2 | Current job number: 8 |
Current second: 17 | Core: 1 | Current job number: 2 |
Current second: 17 | Core: 2 | Current job number: 8 |
Current second: 18 | Core: 1 | Current job number: 2 |
Current second: 18 | Core: 2 | Current job number: 8 |
Current second: 19 | Core: 1 | Current job number: 2 |
Current second: 19 | Core: 2 | Current job number: 8 |
Current second: 20 | Core: 1 | Current job number: 2 |
Current second: 20 | Core: 2 | Current job number: 8 |
Current second: 21 | Core: 1 | Current job number: 2 |
Current second: 21 | Core: 2 | Current job number: 7 |
Current second: 22 | Core: 1 | Current job number: 2 |
Current second: 22 | Core: 2 | Current job number: 7 |
Current second: 23 | Core: 1 | Current job number: 2 |
Current second: 23 | Core: 2 | Current job number: 7 |
Completed job 2
Current second: 24 | Core: 1 | Current job number: 2 |
Current second: 24 | Core: 2 | Current job number: 7 |
Current second: 25 | Core: 1 | Current job number: 8 |
Current second: 25 | Core: 2 | Current job number: 7 |
Current second: 26 | Core: 1 | Current job number: 8 |
Current second: 26 | Core: 2 | Current job number: 7 |
Current second: 27 | Core: 1 | Current job number: 8 |
Current second: 27 | Core: 2 | Current job number: 7 |
Current second: 28 | Core: 1 | Current job number: 8 |
Current second: 28 | Core: 2 | Current job number: 7 |
Current second: 29 | Core: 1 | Current job number: 8 |
Current second: 29 | Core: 2 | Current job number: 7 |
Current second: 30 | Core: 1 | Current job number: 6 |
Current second: 30 | Core: 2 | Current job number: 7 |
Current second: 31 | Core: 1 | Current job number: 6 |
Current second: 31 | Core: 2 | Current job number: 7 |
Current second: 32 | Core: 1 | Current job number: 6 |
Current second: 32 | Core: 2 | Current job number: 7 |
Completed job 6
Current second: 33 | Core: 1 | Current job number: 6 |
Current second: 33 | Core: 2 | Current job number: 7 |
Current second: 34 | Core: 1 | Current job number: 8 |
Current second: 34 | Core: 2 | Current job number: 7 |
Current second: 35 | Core: 1 | Current job number: 8 |
Current second: 35 | Core: 2 | Current job number: 7 |
Current second: 36 | Core: 1 | Current job number: 8 |
Current second: 36 | Core: 2 | Current job number: 7 |
Current second: 37 | Core: 1 | Current job number: 8 |
Current second: 37 | Core: 2 | Current job number: 7 |
```

```
Current second: 38 | Core: 1 | Current job number: 8 |
Current second: 38 | Core: 2 | Current job number: 7 |
Current second: 39 | Core: 1 | Current job number: 8 |
Current second: 39 | Core: 2 | Current job number: 7 |
Current second: 40 | Core: 1 | Current job number: 8 |
Current second: 40 | Core: 2 | Current job number: 7 |
Current second: 41 | Core: 1 | Current job number: 8 |
Current second: 41 | Core: 2 | Current job number: 7 |
Current second: 42 | Core: 1 | Current job number: 8 |
Current second: 42 | Core: 2 | Current job number: 7 |
Current second: 43 | Core: 1 | Current job number: 8 |
Current second: 43 | Core: 2 | Current job number: 7 |
Current second: 44 | Core: 1 | Current job number: 8 |
Current second: 44 | Core: 2 | Current job number: 7 |
Current second: 45 | Core: 1 | Current job number: 8 |
Current second: 45 | Core: 2 | Current job number: 7 |
Current second: 46 | Core: 1 | Current job number: 8 |
Current second: 46 | Core: 2 | Current job number: 7 |
Current second: 47 | Core: 1 | Current job number: 8 |
Current second: 47 | Core: 2 | Current job number: 7 |
Current second: 48 | Core: 1 | Current job number: 8 |
Current second: 48 | Core: 2 | Current job number: 7 |
Current second: 49 | Core: 1 | Current job number: 8 |
Current second: 49 | Core: 2 | Current job number: 7 |
Current second: 50 | Core: 1 | Current job number: 8 |
Current second: 50 | Core: 2 | Current job number: 7 |
Current second: 51 | Core: 1 | Current job number: 8 |
Current second: 51 | Core: 2 | Current job number: 7 |
Current second: 52 | Core: 1 | Current job number: 8 |
Current second: 52 | Core: 2 | Current job number: 7 |
Current second: 53 | Core: 1 | Current job number: 8 |
Current second: 53 | Core: 2 | Current job number: 7 |
Current second: 54 | Core: 1 | Current job number: 8 |
Current second: 54 | Core: 2 | Current job number: 7 |
Current second: 55 | Core: 1 | Current job number: 8 |
Current second: 55 | Core: 2 | Current job number: 7 |
Current second: 56 | Core: 1 | Current job number: 8 |
Current second: 56 | Core: 2 | Current job number: 7 |
Current second: 57 | Core: 1 | Current job number: 8 |
Completed job 7
Current second: 57 | Core: 2 | Current job number: 7 |
Current second: 58 | Core: 1 | Current job number: 8 |
Current second: 58 | Core: 2 | Current job number: 1 |
Current second: 59 | Core: 1 | Current job number: 8 |
Current second: 59 | Core: 2 | Current job number: 1 |
Current second: 60 | Core: 1 | Current job number: 8 |
Current second: 60 | Core: 2 | Current job number: 1 |
Current second: 61 | Core: 1 | Current job number: 8 |
Current second: 61 | Core: 2 | Current job number: 1 |
Current second: 62 | Core: 1 | Current job number: 8 |
```

Current second: 62	Core: 2	Current job number: 1	
Current second: 63	Core: 1	Current job number: 8	
Current second: 63	Core: 2	Current job number: 1	
Current second: 64	Core: 1	Current job number: 8	
Current second: 64	Core: 2	Current job number: 1	
Current second: 65	Core: 1	Current job number: 8	
Current second: 65	Core: 2	Current job number: 1	
Current second: 66	Core: 1	Current job number: 8	
Current second: 66	Core: 2	Current job number: 1	
Current second: 67	Core: 1	Current job number: 8	
Current second: 67	Core: 2	Current job number: 1	
Current second: 68	Core: 1	Current job number: 8	
Current second: 68	Core: 2	Current job number: 1	
Current second: 69	Core: 1	Current job number: 8	
Current second: 69	Core: 2	Current job number: 1	
Current second: 70	Core: 1	Current job number: 8	
Current second: 70	Core: 2	Current job number: 1	
Current second: 71	Core: 1	Current job number: 8	
Current second: 71	Core: 2	Current job number: 1	
Current second: 72	Core: 1	Current job number: 8	
Current second: 72	Core: 2	Current job number: 1	
Current second: 73	Core: 1	Current job number: 8	
Current second: 73	Core: 2	Current job number: 1	
Current second: 74	Core: 1	Current job number: 8	
Current second: 74	Core: 2	Current job number: 1	
Current second: 75	Core: 1	Current job number: 8	
Current second: 75	Core: 2	Current job number: 1	
Current second: 76	Core: 1	Current job number: 8	
Current second: 76	Core: 2	Current job number: 1	
Current second: 77	Core: 1	Current job number: 8	
Current second: 77	Core: 2	Current job number: 1	
Current second: 78	Core: 1	Current job number: 8	
Current second: 78	Core: 2	Current job number: 1	
Current second: 79	Core: 1	Current job number: 8	
Current second: 79	Core: 2	Current job number: 1	
Current second: 80	Core: 1	Current job number: 8	
Current second: 80	Core: 2	Current job number: 1	
Current second: 81	Core: 1	Current job number: 8	
Current second: 81	Core: 2	Current job number: 1	
Current second: 82	Core: 1	Current job number: 8	
Current second: 82	Core: 2	Current job number: 1	
Current second: 83	Core: 1	Current job number: 8	
Current second: 83	Core: 2	Current job number: 1	
Current second: 84	Core: 1	Current job number: 8	
Current second: 84	Core: 2	Current job number: 1	
Current second: 85	Core: 1	Current job number: 8	
Current second: 85	Core: 2	Current job number: 1	
Current second: 86	Core: 1	Current job number: 8	
Current second: 86	Core: 2	Current job number: 1	
Current second: 87	Core: 1	Current job number: 8	

```
Current second: 87 | Core: 2 | Current job number: 1 |
Current second: 88 | Core: 1 | Current job number: 8 |
Current second: 88 | Core: 2 | Current job number: 1 |
Current second: 89 | Core: 1 | Current job number: 8 |
Current second: 89 | Core: 2 | Current job number: 1 |
Current second: 90 | Core: 1 | Current job number: 8 |
Current second: 90 | Core: 2 | Current job number: 1 |
Current second: 91 | Core: 1 | Current job number: 8 |
Current second: 91 | Core: 2 | Current job number: 1 |
Current second: 92 | Core: 1 | Current job number: 8 |
Current second: 92 | Core: 2 | Current job number: 1 |
Current second: 93 | Core: 1 | Current job number: 8 |
Current second: 93 | Core: 2 | Current job number: 1 |
Current second: 94 | Core: 1 | Current job number: 8 |
Current second: 94 | Core: 2 | Current job number: 1 |
Current second: 95 | Core: 1 | Current job number: 8 |
Current second: 95 | Core: 2 | Current job number: 1 |
Current second: 96 | Core: 1 | Current job number: 8 |
Current second: 96 | Core: 2 | Current job number: 1 |
Current second: 97 | Core: 1 | Current job number: 8 |
Current second: 97 | Core: 2 | Current job number: 1 |
Current second: 98 | Core: 1 | Current job number: 8 |
Current second: 98 | Core: 2 | Current job number: 1 |
Current second: 99 | Core: 1 | Current job number: 8 |
Current second: 99 | Core: 2 | Current job number: 1 |
Current second: 100 | Core: 1 | Current job number: 8 |
Current second: 100 | Core: 2 | Current job number: 1 |
Current second: 101 | Core: 1 | Current job number: 8 |
Current second: 101 | Core: 2 | Current job number: 1 |
Current second: 102 | Core: 1 | Current job number: 8 |
Current second: 102 | Core: 2 | Current job number: 1 |
Current second: 103 | Core: 1 | Current job number: 8 |
Current second: 103 | Core: 2 | Current job number: 1 |
Current second: 104 | Core: 1 | Current job number: 8 |
Current second: 104 | Core: 2 | Current job number: 1 |
Current second: 105 | Core: 1 | Current job number: 8 |
Current second: 105 | Core: 2 | Current job number: 1 |
Current second: 106 | Core: 1 | Current job number: 8 |
Current second: 106 | Core: 2 | Current job number: 1 |
Current second: 107 | Core: 1 | Current job number: 8 |
Current second: 107 | Core: 2 | Current job number: 1 |
Current second: 108 | Core: 1 | Current job number: 8 |
Current second: 108 | Core: 2 | Current job number: 1 |
Current second: 109 | Core: 1 | Current job number: 8 |
Current second: 109 | Core: 2 | Current job number: 1 |
Current second: 110 | Core: 1 | Current job number: 8 |
Current second: 110 | Core: 2 | Current job number: 1 |
Current second: 111 | Core: 1 | Current job number: 8 |
Current second: 111 | Core: 2 | Current job number: 1 |
Completed job 8
```

```
Current second: 112 | Core: 1 | Current job number: 8 |
Current second: 112 | Core: 2 | Current job number: 1 |
Current second: 113 | Core: 1 | Current job number: 3 |
Current second: 113 | Core: 2 | Current job number: 1 |
Current second: 114 | Core: 1 | Current job number: 3 |
Current second: 114 | Core: 2 | Current job number: 1 |
Current second: 115 | Core: 1 | Current job number: 3 |
Current second: 115 | Core: 2 | Current job number: 1 |
Current second: 116 | Core: 1 | Current job number: 3 |
Current second: 116 | Core: 2 | Current job number: 1 |
Completed job 3
Current second: 117 | Core: 1 | Current job number: 3 |
Current second: 117 | Core: 2 | Current job number: 1 |
Current second: 118 | Core: 1 | Current job number: 5 |
Current second: 118 | Core: 2 | Current job number: 1 |
Current second: 119 | Core: 1 | Current job number: 5 |
Current second: 119 | Core: 2 | Current job number: 1 |
Current second: 120 | Core: 1 | Current job number: 5 |
Current second: 120 | Core: 2 | Current job number: 1 |
Current second: 121 | Core: 1 | Current job number: 5 |
Current second: 121 | Core: 2 | Current job number: 1 |
Current second: 122 | Core: 1 | Current job number: 5 |
Current second: 122 | Core: 2 | Current job number: 1 |
Current second: 123 | Core: 1 | Current job number: 5 |
Current second: 123 | Core: 2 | Current job number: 1 |
Current second: 124 | Core: 1 | Current job number: 5 |
Current second: 124 | Core: 2 | Current job number: 1 |
Current second: 125 | Core: 1 | Current job number: 5 |
Current second: 125 | Core: 2 | Current job number: 1 |
Current second: 126 | Core: 1 | Current job number: 5 |
Current second: 126 | Core: 2 | Current job number: 1 |
Current second: 127 | Core: 1 | Current job number: 5 |
Current second: 127 | Core: 2 | Current job number: 1 |
Current second: 128 | Core: 1 | Current job number: 5 |
Current second: 128 | Core: 2 | Current job number: 1 |
Current second: 129 | Core: 1 | Current job number: 5 |
Current second: 129 | Core: 2 | Current job number: 1 |
Current second: 130 | Core: 1 | Current job number: 5 |
Current second: 130 | Core: 2 | Current job number: 1 |
Current second: 131 | Core: 1 | Current job number: 5 |
Current second: 131 | Core: 2 | Current job number: 1 |
Current second: 132 | Core: 1 | Current job number: 5 |
Current second: 132 | Core: 2 | Current job number: 1 |
Current second: 133 | Core: 1 | Current job number: 5 |
Current second: 133 | Core: 2 | Current job number: 1 |
Current second: 134 | Core: 1 | Current job number: 5 |
Current second: 134 | Core: 2 | Current job number: 1 |
Current second: 135 | Core: 1 | Current job number: 5 |
Current second: 135 | Core: 2 | Current job number: 1 |
Current second: 136 | Core: 1 | Current job number: 5 |
```

```
Current second: 136 | Core: 2 | Current job number: 1 |
Current second: 137 | Core: 1 | Current job number: 5 |
Current second: 137 | Core: 2 | Current job number: 1 |
Current second: 138 | Core: 1 | Current job number: 5 |
Current second: 138 | Core: 2 | Current job number: 1 |
Current second: 139 | Core: 1 | Current job number: 5 |
Current second: 139 | Core: 2 | Current job number: 1 |
Current second: 140 | Core: 1 | Current job number: 5 |
Current second: 140 | Core: 2 | Current job number: 1 |
Current second: 141 | Core: 1 | Current job number: 5 |
Current second: 141 | Core: 2 | Current job number: 1 |
Current second: 142 | Core: 1 | Current job number: 5 |
Current second: 142 | Core: 2 | Current job number: 1 |
Current second: 143 | Core: 1 | Current job number: 5 |
Current second: 143 | Core: 2 | Current job number: 1 |
Current second: 144 | Core: 1 | Current job number: 5 |
Current second: 144 | Core: 2 | Current job number: 1 |
Current second: 145 | Core: 1 | Current job number: 5 |
Current second: 145 | Core: 2 | Current job number: 1 |
Current second: 146 | Core: 1 | Current job number: 5 |
Current second: 146 | Core: 2 | Current job number: 1 |
Current second: 147 | Core: 1 | Current job number: 5 |
Current second: 147 | Core: 2 | Current job number: 1 |
Current second: 148 | Core: 1 | Current job number: 5 |
Current second: 148 | Core: 2 | Current job number: 1 |
Current second: 149 | Core: 1 | Current job number: 5 |
Current second: 149 | Core: 2 | Current job number: 1 |
Current second: 150 | Core: 1 | Current job number: 5 |
Current second: 150 | Core: 2 | Current job number: 1 |
Current second: 151 | Core: 1 | Current job number: 5 |
Current second: 151 | Core: 2 | Current job number: 1 |
Current second: 152 | Core: 1 | Current job number: 5 |
Current second: 152 | Core: 2 | Current job number: 1 |
Current second: 153 | Core: 1 | Current job number: 5 |
Current second: 153 | Core: 2 | Current job number: 1 |
Current second: 154 | Core: 1 | Current job number: 5 |
Current second: 154 | Core: 2 | Current job number: 1 |
Current second: 155 | Core: 1 | Current job number: 5 |
Current second: 155 | Core: 2 | Current job number: 1 |
Current second: 156 | Core: 1 | Current job number: 5 |
Current second: 156 | Core: 2 | Current job number: 1 |
Current second: 157 | Core: 1 | Current job number: 5 |
Completed job 1
Current second: 157 | Core: 2 | Current job number: 1 |
Current second: 158 | Core: 1 | Current job number: 5 |
Current second: 158 | Core: 2 | Current job number: 4 |
Current second: 159 | Core: 1 | Current job number: 5 |
Current second: 159 | Core: 2 | Current job number: 4 |
Current second: 160 | Core: 1 | Current job number: 5 |
Current second: 160 | Core: 2 | Current job number: 4 |
```



```
Current second: 161 | Core: 1 |Current job number: 5 |
Current second: 161 | Core: 2 |Current job number: 4 |
Current second: 162 | Core: 1 |Current job number: 5 |
Current second: 162 | Core: 2 |Current job number: 4 |
Current second: 163 | Core: 1 |Current job number: 5 |
Current second: 163 | Core: 2 |Current job number: 4 |
Current second: 164 | Core: 1 |Current job number: 5 |
Current second: 164 | Core: 2 |Current job number: 4 |
Current second: 165 | Core: 1 |Current job number: 5 |
Current second: 165 | Core: 2 |Current job number: 4 |
Current second: 166 | Core: 1 |Current job number: 5 |
Current second: 166 | Core: 2 |Current job number: 4 |
Completed job 5
Current second: 167 | Core: 1 |Current job number: 5 |
Current second: 167 | Core: 2 |Current job number: 4 |
Current second: 168 |Core: 1 |Core Idle
Completed job 4
Current second: 168 | Core: 2 |Current job number: 4 |
```

Statistics:

```
Job number: 2 | Wait time: 0      | Execution time: 15  |
Job number: 6 | Wait time: 0      | Execution time: 4   |
Job number: 7 | Wait time: 0      | Execution time: 37  |
Job number: 8 | Wait time: 0      | Execution time: 108 |
Job number: 3 | Wait time: 0      | Execution time: 111 |
Job number: 1 | Wait time: 48     | Execution time: 100 |
Job number: 5 | Wait time: 98     | Execution time: 50  |
Job number: 4 | Wait time: 149    | Execution time: 11  |
```

Average wait time: 36.9

Average execution time: 54.5