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1 /Library/Java/JavaVirtualMachines/jdk-11.0.2.jdk/Contents/Home/bin/j
2 Please enter number of customers :
3 20
4 CID : 1
5 Time Since Last Arrival : 0
6 Arrival Time : 0
7 Service Time : 1
8 Time Server Begins : 0
9 Time Customer waits in Queue : 0
10 Time Service End : 1
11 Time Customer Spends in System : 1
12 Idle Time of Server : 0
13 Random Digit for Service Time : 2
14 Random Digit for Arrival Time : 707
15 ++++++
16 CID : 2
17 Time Since Last Arrival : 7
18 Arrival Time : 7
19 Service Time : 4
20 Time Server Begins : 7
21 Time Customer waits in Queue : 0
22 Time Service End : 11
23 Time Customer Spends in System : 4
24 Idle Time of Server : 6
25 Random Digit for Service Time : 83
26 Random Digit for Arrival Time : 826
27 ++++++
28 CID : 3
29 Time Since Last Arrival : 5
30 Arrival Time : 12
31 Service Time : 1
32 Time Server Begins : 12
33 Time Customer waits in Queue : 0
34 Time Service End : 13
35 Time Customer Spends in System : 1
36 Idle Time of Server : 1
37 Random Digit for Service Time : 3
38 Random Digit for Arrival Time : 532
39 ++++++
40 CID : 4
41 Time Since Last Arrival : 3
42 Arrival Time : 15
43 Service Time : 1
44 Time Server Begins : 15
45 Time Customer waits in Queue : 0
46 Time Service End : 16
47 Time Customer Spends in System : 1
48 Idle Time of Server : 2
49 Random Digit for Service Time : 1
50 Random Digit for Arrival Time : 356
51 ++++++
52 CID : 5
53 Time Since Last Arrival : 2
54 Arrival Time : 17
55 Service Time : 2
56 Time Server Begins : 17
57 Time Customer waits in Queue : 0
58 Time Service End : 19
59 Time Customer Spends in System : 2
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60 Idle Time of Server : 1
61 Random Digit for Service Time : 18
62 Random Digit for Arrival Time : 179
63 ++++++
64 CID : 6
65 Time Since Last Arrival : 8
66 Arrival Time : 25
67 Service Time : 4
68 Time Server Begins : 25
69 Time Customer waits in Queue : 0
70 Time Service End : 29
71 Time Customer Spends in System : 4
72 Idle Time of Server : 6
73 Random Digit for Service Time : 75
74 Random Digit for Arrival Time : 918
75 ++++++
76 CID : 7
77 Time Since Last Arrival : 1
78 Arrival Time : 26
79 Service Time : 4
80 Time Server Begins : 29
81 Time Customer waits in Queue : 3
82 Time Service End : 33
83 Time Customer Spends in System : 7
84 Idle Time of Server : 0
85 Random Digit for Service Time : 63
86 Random Digit for Arrival Time : 38
87 ++++++
88 CID : 8
89 Time Since Last Arrival : 4
90 Arrival Time : 30
91 Service Time : 2
92 Time Server Begins : 33
93 Time Customer waits in Queue : 3
94 Time Service End : 35
95 Time Customer Spends in System : 5
96 Idle Time of Server : 0
97 Random Digit for Service Time : 17
98 Random Digit for Arrival Time : 437
99 ++++++
100 CID : 9
101 Time Since Last Arrival : 7
102 Arrival Time : 37
103 Service Time : 3
104 Time Server Begins : 37
105 Time Customer waits in Queue : 0
106 Time Service End : 40
107 Time Customer Spends in System : 3
108 Idle Time of Server : 2
109 Random Digit for Service Time : 40
110 Random Digit for Arrival Time : 866
111 ++++++
112 CID : 10
113 Time Since Last Arrival : 6
114 Arrival Time : 43
115 Service Time : 3
116 Time Server Begins : 43
117 Time Customer waits in Queue : 0
118 Time Service End : 46
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119 Time Customer Spends in System : 3
120 Idle Time of Server : 3
121 Random Digit for Service Time : 40
122 Random Digit for Arrival Time : 728
123 ++++++
124 CID : 11
125 Time Since Last Arrival : 7
126 Arrival Time : 50
127 Service Time : 6
128 Time Server Begins : 50
129 Time Customer waits in Queue : 0
130 Time Service End : 56
131 Time Customer Spends in System : 6
132 Idle Time of Server : 4
133 Random Digit for Service Time : 99
134 Random Digit for Arrival Time : 816
135 ++++++
136 CID : 12
137 Time Since Last Arrival : 7
138 Arrival Time : 57
139 Service Time : 1
140 Time Server Begins : 57
141 Time Customer waits in Queue : 0
142 Time Service End : 58
143 Time Customer Spends in System : 1
144 Idle Time of Server : 1
145 Random Digit for Service Time : 2
146 Random Digit for Arrival Time : 785
147 ++++++
148 CID : 13
149 Time Since Last Arrival : 6
150 Arrival Time : 63
151 Service Time : 5
152 Time Server Begins : 63
153 Time Customer waits in Queue : 0
154 Time Service End : 68
155 Time Customer Spends in System : 5
156 Idle Time of Server : 5
157 Random Digit for Service Time : 86
158 Random Digit for Arrival Time : 701
159 ++++++
160 CID : 14
161 Time Since Last Arrival : 5
162 Arrival Time : 68
163 Service Time : 4
164 Time Server Begins : 68
165 Time Customer waits in Queue : 0
166 Time Service End : 72
167 Time Customer Spends in System : 4
168 Idle Time of Server : 0
169 Random Digit for Service Time : 80
170 Random Digit for Arrival Time : 567
171 ++++++
172 CID : 15
173 Time Since Last Arrival : 1
174 Arrival Time : 69
175 Service Time : 3
176 Time Server Begins : 72
177 Time Customer waits in Queue : 3
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178 Time Service End : 75
179 Time Customer Spends in System : 6
180 Idle Time of Server : 0
181 Random Digit for Service Time : 58
182 Random Digit for Arrival Time : 75
183 ++++++
184 CID : 16
185 Time Since Last Arrival : 4
186 Arrival Time : 73
187 Service Time : 5
188 Time Server Begins : 75
189 Time Customer waits in Queue : 2
190 Time Service End : 80
191 Time Customer Spends in System : 7
192 Idle Time of Server : 0
193 Random Digit for Service Time : 87
194 Random Digit for Arrival Time : 462
195 ++++++
196 CID : 17
197 Time Since Last Arrival : 4
198 Arrival Time : 77
199 Service Time : 4
200 Time Server Begins : 80
201 Time Customer waits in Queue : 3
202 Time Service End : 84
203 Time Customer Spends in System : 7
204 Idle Time of Server : 0
205 Random Digit for Service Time : 76
206 Random Digit for Arrival Time : 491
207 ++++++
208 CID : 18
209 Time Since Last Arrival : 6
210 Arrival Time : 83
211 Service Time : 4
212 Time Server Begins : 84
213 Time Customer waits in Queue : 1
214 Time Service End : 88
215 Time Customer Spends in System : 5
216 Idle Time of Server : 0
217 Random Digit for Service Time : 82
218 Random Digit for Arrival Time : 666
219 ++++++
220 CID : 19
221 Time Since Last Arrival : 1
222 Arrival Time : 84
223 Service Time : 3
224 Time Server Begins : 88
225 Time Customer waits in Queue : 4
226 Time Service End : 91
227 Time Customer Spends in System : 7
228 Idle Time of Server : 0
229 Random Digit for Service Time : 31
230 Random Digit for Arrival Time : 82
231 ++++++
232 CID : 20
233 Time Since Last Arrival : 1
234 Arrival Time : 85
235 Service Time : 2
236 Time Server Begins : 91
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237 Time Customer waits in Queue : 6
238 Time Service End : 93
239 Time Customer Spends in System : 8
240 Idle Time of Server : 0
241 Random Digit for Service Time : 13
242 Random Digit for Arrival Time : 108
243 ++++++-----
244 average waiting time for a customer : 1.25
245 probably that a customer has to wait in queue : 0.4
246 fraction of idle time of the server : 0.3333333333333333
247 probably of the server being busy : 0.6666666666666667
248 average service time : 3.1
249 expected value : 3.2
250 average time between arrivals : 4.473684210526316
251 discrete uniform distribution : 4.5
252 average waiting time of those who wait : 3.125
253 average time a customer spends in the system : 4.35
254 average time customer spends in the system : 4.35
255
256 Process finished with exit code 0
257
```