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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 : 2
8 Time Server Begins : 0
9 Time Customer waits in Queue : 0
10 Time Service End : 2
11 Time Customer Spends in System : 2
12 Idle Time of Server : 0
13 Random Digit for Service Time : 26
14 Random Digit for Arrival Time : 907
15 ++++++
16 CID : 2
17 Time Since Last Arrival : 5
18 Arrival Time : 5
19 Service Time : 3
20 Time Server Begins : 5
21 Time Customer waits in Queue : 0
22 Time Service End : 8
23 Time Customer Spends in System : 3
24 Idle Time of Server : 3
25 Random Digit for Service Time : 33
26 Random Digit for Arrival Time : 536
27 ++++++
28 CID : 3
29 Time Since Last Arrival : 6
30 Arrival Time : 11
31 Service Time : 3
32 Time Server Begins : 11
33 Time Customer waits in Queue : 0
34 Time Service End : 14
35 Time Customer Spends in System : 3
36 Idle Time of Server : 3
37 Random Digit for Service Time : 35
38 Random Digit for Arrival Time : 693
39 ++++++
40 CID : 4
41 Time Since Last Arrival : 3
42 Arrival Time : 14
43 Service Time : 4
44 Time Server Begins : 14
45 Time Customer waits in Queue : 0
46 Time Service End : 18
47 Time Customer Spends in System : 4
48 Idle Time of Server : 0
49 Random Digit for Service Time : 77
50 Random Digit for Arrival Time : 289
51 ++++++
52 CID : 5
53 Time Since Last Arrival : 5
54 Arrival Time : 19
55 Service Time : 3
56 Time Server Begins : 19
57 Time Customer waits in Queue : 0
58 Time Service End : 22
59 Time Customer Spends in System : 3
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60 Idle Time of Server : 1
61 Random Digit for Service Time : 57
62 Random Digit for Arrival Time : 559
63 ++++++
64 CID : 6
65 Time Since Last Arrival : 2
66 Arrival Time : 21
67 Service Time : 3
68 Time Server Begins : 22
69 Time Customer waits in Queue : 1
70 Time Service End : 25
71 Time Customer Spends in System : 4
72 Idle Time of Server : 0
73 Random Digit for Service Time : 47
74 Random Digit for Arrival Time : 133
75 ++++++
76 CID : 7
77 Time Since Last Arrival : 3
78 Arrival Time : 24
79 Service Time : 5
80 Time Server Begins : 25
81 Time Customer waits in Queue : 1
82 Time Service End : 30
83 Time Customer Spends in System : 6
84 Idle Time of Server : 0
85 Random Digit for Service Time : 88
86 Random Digit for Arrival Time : 276
87 ++++++
88 CID : 8
89 Time Since Last Arrival : 7
90 Arrival Time : 31
91 Service Time : 3
92 Time Server Begins : 31
93 Time Customer waits in Queue : 0
94 Time Service End : 34
95 Time Customer Spends in System : 3
96 Idle Time of Server : 1
97 Random Digit for Service Time : 38
98 Random Digit for Arrival Time : 793
99 ++++++
100 CID : 9
101 Time Since Last Arrival : 5
102 Arrival Time : 36
103 Service Time : 6
104 Time Server Begins : 36
105 Time Customer waits in Queue : 0
106 Time Service End : 42
107 Time Customer Spends in System : 6
108 Idle Time of Server : 2
109 Random Digit for Service Time : 96
110 Random Digit for Arrival Time : 576
111 ++++++
112 CID : 10
113 Time Since Last Arrival : 5
114 Arrival Time : 41
115 Service Time : 3
116 Time Server Begins : 42
117 Time Customer waits in Queue : 1
118 Time Service End : 45
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119 Time Customer Spends in System : 4
120 Idle Time of Server : 0
121 Random Digit for Service Time : 36
122 Random Digit for Arrival Time : 579
123 ++++++
124 CID : 11
125 Time Since Last Arrival : 7
126 Arrival Time : 48
127 Service Time : 1
128 Time Server Begins : 48
129 Time Customer waits in Queue : 0
130 Time Service End : 49
131 Time Customer Spends in System : 1
132 Idle Time of Server : 3
133 Random Digit for Service Time : 2
134 Random Digit for Arrival Time : 777
135 ++++++
136 CID : 12
137 Time Since Last Arrival : 2
138 Arrival Time : 50
139 Service Time : 2
140 Time Server Begins : 50
141 Time Customer waits in Queue : 0
142 Time Service End : 52
143 Time Customer Spends in System : 2
144 Idle Time of Server : 1
145 Random Digit for Service Time : 13
146 Random Digit for Arrival Time : 223
147 ++++++
148 CID : 13
149 Time Since Last Arrival : 2
150 Arrival Time : 52
151 Service Time : 3
152 Time Server Begins : 52
153 Time Customer waits in Queue : 0
154 Time Service End : 55
155 Time Customer Spends in System : 3
156 Idle Time of Server : 0
157 Random Digit for Service Time : 33
158 Random Digit for Arrival Time : 167
159 ++++++
160 CID : 14
161 Time Since Last Arrival : 5
162 Arrival Time : 57
163 Service Time : 3
164 Time Server Begins : 57
165 Time Customer waits in Queue : 0
166 Time Service End : 60
167 Time Customer Spends in System : 3
168 Idle Time of Server : 2
169 Random Digit for Service Time : 53
170 Random Digit for Arrival Time : 522
171 ++++++
172 CID : 15
173 Time Since Last Arrival : 8
174 Arrival Time : 65
175 Service Time : 4
176 Time Server Begins : 65
177 Time Customer waits in Queue : 0
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178 Time Service End : 69
179 Time Customer Spends in System : 4
180 Idle Time of Server : 5
181 Random Digit for Service Time : 69
182 Random Digit for Arrival Time : 964
183 ++++++
184 CID : 16
185 Time Since Last Arrival : 5
186 Arrival Time : 70
187 Service Time : 3
188 Time Server Begins : 70
189 Time Customer waits in Queue : 0
190 Time Service End : 73
191 Time Customer Spends in System : 3
192 Idle Time of Server : 1
193 Random Digit for Service Time : 41
194 Random Digit for Arrival Time : 571
195 ++++++
196 CID : 17
197 Time Since Last Arrival : 7
198 Arrival Time : 77
199 Service Time : 2
200 Time Server Begins : 77
201 Time Customer waits in Queue : 0
202 Time Service End : 79
203 Time Customer Spends in System : 2
204 Idle Time of Server : 4
205 Random Digit for Service Time : 16
206 Random Digit for Arrival Time : 759
207 ++++++
208 CID : 18
209 Time Since Last Arrival : 5
210 Arrival Time : 82
211 Service Time : 3
212 Time Server Begins : 82
213 Time Customer waits in Queue : 0
214 Time Service End : 85
215 Time Customer Spends in System : 3
216 Idle Time of Server : 3
217 Random Digit for Service Time : 40
218 Random Digit for Arrival Time : 504
219 ++++++
220 CID : 19
221 Time Since Last Arrival : 6
222 Arrival Time : 88
223 Service Time : 3
224 Time Server Begins : 88
225 Time Customer waits in Queue : 0
226 Time Service End : 91
227 Time Customer Spends in System : 3
228 Idle Time of Server : 3
229 Random Digit for Service Time : 45
230 Random Digit for Arrival Time : 706
231 ++++++
232 CID : 20
233 Time Since Last Arrival : 5
234 Arrival Time : 93
235 Service Time : 5
236 Time Server Begins : 93
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237 Time Customer waits in Queue : 0
238 Time Service End : 98
239 Time Customer Spends in System : 5
240 Idle Time of Server : 2
241 Random Digit for Service Time : 86
242 Random Digit for Arrival Time : 580
243 ++++++-----
244 average waiting time for a customer : 0.15
245 probably that a customer has to wait in queue : 0.15
246 fraction of idle time of the server : 0.3469387755102041
247 probably of the server being busy : 0.653061224489796
248 average service time : 3.2
249 expected value : 3.2
250 average time between arrivals : 4.894736842105263
251 discrete uniform distribution : 4.5
252 average waiting time of those who wait : 1.0
253 average time a customer spends in the system : 3.35
254 average time customer spends in the system : 3.35
255
256 Process finished with exit code 0
257
```