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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 : 3
8 Time Server Begins : 0
9 Time Customer waits in Queue : 0
10 Time Service End : 3
11 Time Customer Spends in System : 3
12 Idle Time of Server : 0
13 Random Digit for Service Time : 45
14 Random Digit for Arrival Time : 246
15 ++++++
16 CID : 2
17 Time Since Last Arrival : 3
18 Arrival Time : 3
19 Service Time : 5
20 Time Server Begins : 3
21 Time Customer waits in Queue : 0
22 Time Service End : 8
23 Time Customer Spends in System : 5
24 Idle Time of Server : 0
25 Random Digit for Service Time : 91
26 Random Digit for Arrival Time : 371
27 ++++++
28 CID : 3
29 Time Since Last Arrival : 1
30 Arrival Time : 4
31 Service Time : 1
32 Time Server Begins : 8
33 Time Customer waits in Queue : 4
34 Time Service End : 9
35 Time Customer Spends in System : 5
36 Idle Time of Server : 0
37 Random Digit for Service Time : 3
38 Random Digit for Arrival Time : 54
39 ++++++
40 CID : 4
41 Time Since Last Arrival : 4
42 Arrival Time : 8
43 Service Time : 5
44 Time Server Begins : 9
45 Time Customer waits in Queue : 1
46 Time Service End : 14
47 Time Customer Spends in System : 6
48 Idle Time of Server : 0
49 Random Digit for Service Time : 93
50 Random Digit for Arrival Time : 484
51 ++++++
52 CID : 5
53 Time Since Last Arrival : 3
54 Arrival Time : 11
55 Service Time : 3
56 Time Server Begins : 14
57 Time Customer waits in Queue : 3
58 Time Service End : 17
59 Time Customer Spends in System : 6
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60 Idle Time of Server : 0
61 Random Digit for Service Time : 47
62 Random Digit for Arrival Time : 265
63 ++++++
64 CID : 6
65 Time Since Last Arrival : 1
66 Arrival Time : 12
67 Service Time : 3
68 Time Server Begins : 17
69 Time Customer waits in Queue : 5
70 Time Service End : 20
71 Time Customer Spends in System : 8
72 Idle Time of Server : 0
73 Random Digit for Service Time : 59
74 Random Digit for Arrival Time : 42
75 ++++++
76 CID : 7
77 Time Since Last Arrival : 1
78 Arrival Time : 13
79 Service Time : 3
80 Time Server Begins : 20
81 Time Customer waits in Queue : 7
82 Time Service End : 23
83 Time Customer Spends in System : 10
84 Idle Time of Server : 0
85 Random Digit for Service Time : 56
86 Random Digit for Arrival Time : 15
87 ++++++
88 CID : 8
89 Time Since Last Arrival : 7
90 Arrival Time : 20
91 Service Time : 5
92 Time Server Begins : 23
93 Time Customer waits in Queue : 3
94 Time Service End : 28
95 Time Customer Spends in System : 8
96 Idle Time of Server : 0
97 Random Digit for Service Time : 91
98 Random Digit for Arrival Time : 869
99 ++++++
100 CID : 9
101 Time Since Last Arrival : 5
102 Arrival Time : 25
103 Service Time : 2
104 Time Server Begins : 28
105 Time Customer waits in Queue : 3
106 Time Service End : 30
107 Time Customer Spends in System : 5
108 Idle Time of Server : 0
109 Random Digit for Service Time : 18
110 Random Digit for Arrival Time : 541
111 ++++++
112 CID : 10
113 Time Since Last Arrival : 5
114 Arrival Time : 30
115 Service Time : 2
116 Time Server Begins : 30
117 Time Customer waits in Queue : 0
118 Time Service End : 32
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119 Time Customer Spends in System : 2
120 Idle Time of Server : 0
121 Random Digit for Service Time : 21
122 Random Digit for Arrival Time : 503
123 ++++++-----
124 CID : 11
125 Time Since Last Arrival : 7
126 Arrival Time : 37
127 Service Time : 6
128 Time Server Begins : 37
129 Time Customer waits in Queue : 0
130 Time Service End : 43
131 Time Customer Spends in System : 6
132 Idle Time of Server : 5
133 Random Digit for Service Time : 99
134 Random Digit for Arrival Time : 826
135 ++++++-----
136 CID : 12
137 Time Since Last Arrival : 7
138 Arrival Time : 44
139 Service Time : 1
140 Time Server Begins : 44
141 Time Customer waits in Queue : 0
142 Time Service End : 45
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 : 837
147 ++++++-----
148 CID : 13
149 Time Since Last Arrival : 8
150 Arrival Time : 52
151 Service Time : 4
152 Time Server Begins : 52
153 Time Customer waits in Queue : 0
154 Time Service End : 56
155 Time Customer Spends in System : 4
156 Idle Time of Server : 7
157 Random Digit for Service Time : 74
158 Random Digit for Arrival Time : 982
159 ++++++-----
160 CID : 14
161 Time Since Last Arrival : 5
162 Arrival Time : 57
163 Service Time : 2
164 Time Server Begins : 57
165 Time Customer waits in Queue : 0
166 Time Service End : 59
167 Time Customer Spends in System : 2
168 Idle Time of Server : 1
169 Random Digit for Service Time : 25
170 Random Digit for Arrival Time : 616
171 ++++++-----
172 CID : 15
173 Time Since Last Arrival : 8
174 Arrival Time : 65
175 Service Time : 3
176 Time Server Begins : 65
177 Time Customer waits in Queue : 0
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178 Time Service End : 68
179 Time Customer Spends in System : 3
180 Idle Time of Server : 6
181 Random Digit for Service Time : 36
182 Random Digit for Arrival Time : 977
183 ++++++
184 CID : 16
185 Time Since Last Arrival : 8
186 Arrival Time : 73
187 Service Time : 2
188 Time Server Begins : 73
189 Time Customer waits in Queue : 0
190 Time Service End : 75
191 Time Customer Spends in System : 2
192 Idle Time of Server : 5
193 Random Digit for Service Time : 11
194 Random Digit for Arrival Time : 978
195 ++++++
196 CID : 17
197 Time Since Last Arrival : 5
198 Arrival Time : 78
199 Service Time : 5
200 Time Server Begins : 78
201 Time Customer waits in Queue : 0
202 Time Service End : 83
203 Time Customer Spends in System : 5
204 Idle Time of Server : 3
205 Random Digit for Service Time : 93
206 Random Digit for Arrival Time : 592
207 ++++++
208 CID : 18
209 Time Since Last Arrival : 4
210 Arrival Time : 82
211 Service Time : 2
212 Time Server Begins : 83
213 Time Customer waits in Queue : 1
214 Time Service End : 85
215 Time Customer Spends in System : 3
216 Idle Time of Server : 0
217 Random Digit for Service Time : 18
218 Random Digit for Arrival Time : 500
219 ++++++
220 CID : 19
221 Time Since Last Arrival : 1
222 Arrival Time : 83
223 Service Time : 4
224 Time Server Begins : 85
225 Time Customer waits in Queue : 2
226 Time Service End : 89
227 Time Customer Spends in System : 6
228 Idle Time of Server : 0
229 Random Digit for Service Time : 84
230 Random Digit for Arrival Time : 2
231 ++++++
232 CID : 20
233 Time Since Last Arrival : 5
234 Arrival Time : 88
235 Service Time : 4
236 Time Server Begins : 89
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237 Time Customer waits in Queue : 1
238 Time Service End : 93
239 Time Customer Spends in System : 5
240 Idle Time of Server : 0
241 Random Digit for Service Time : 70
242 Random Digit for Arrival Time : 536
243 ++++++-----
244 average waiting time for a customer : 1.5
245 probably that a customer has to wait in queue : 0.5
246 fraction of idle time of the server : 0.3010752688172043
247 probably of the server being busy : 0.6989247311827957
248 average service time : 3.25
249 expected value : 3.2
250 average time between arrivals : 4.631578947368421
251 discrete uniform distribution : 4.5
252 average waiting time of those who wait : 3.0
253 average time a customer spends in the system : 4.75
254 average time customer spends in the system : 4.75
255
256 Process finished with exit code 0
257
```