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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 : 4
8 Time Server Begins : 0
9 Time Customer waits in Queue : 0
10 Time Service End : 4
11 Time Customer Spends in System : 4
12 Idle Time of Server : 0
13 Random Digit for Service Time : 63
14 Random Digit for Arrival Time : 963
15 ++++++
16 CID : 2
17 Time Since Last Arrival : 4
18 Arrival Time : 4
19 Service Time : 2
20 Time Server Begins : 4
21 Time Customer waits in Queue : 0
22 Time Service End : 6
23 Time Customer Spends in System : 2
24 Idle Time of Server : 0
25 Random Digit for Service Time : 13
26 Random Digit for Arrival Time : 447
27 ++++++
28 CID : 3
29 Time Since Last Arrival : 5
30 Arrival Time : 9
31 Service Time : 2
32 Time Server Begins : 9
33 Time Customer waits in Queue : 0
34 Time Service End : 11
35 Time Customer Spends in System : 2
36 Idle Time of Server : 3
37 Random Digit for Service Time : 30
38 Random Digit for Arrival Time : 526
39 ++++++
40 CID : 4
41 Time Since Last Arrival : 8
42 Arrival Time : 17
43 Service Time : 4
44 Time Server Begins : 17
45 Time Customer waits in Queue : 0
46 Time Service End : 21
47 Time Customer Spends in System : 4
48 Idle Time of Server : 6
49 Random Digit for Service Time : 68
50 Random Digit for Arrival Time : 898
51 ++++++
52 CID : 5
53 Time Since Last Arrival : 8
54 Arrival Time : 25
55 Service Time : 4
56 Time Server Begins : 25
57 Time Customer waits in Queue : 0
58 Time Service End : 29
59 Time Customer Spends in System : 4
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60 Idle Time of Server : 4
61 Random Digit for Service Time : 67
62 Random Digit for Arrival Time : 876
63 ++++++
64 CID : 6
65 Time Since Last Arrival : 8
66 Arrival Time : 33
67 Service Time : 5
68 Time Server Begins : 33
69 Time Customer waits in Queue : 0
70 Time Service End : 38
71 Time Customer Spends in System : 5
72 Idle Time of Server : 4
73 Random Digit for Service Time : 86
74 Random Digit for Arrival Time : 944
75 ++++++
76 CID : 7
77 Time Since Last Arrival : 3
78 Arrival Time : 36
79 Service Time : 3
80 Time Server Begins : 38
81 Time Customer waits in Queue : 2
82 Time Service End : 41
83 Time Customer Spends in System : 5
84 Idle Time of Server : 0
85 Random Digit for Service Time : 51
86 Random Digit for Arrival Time : 279
87 ++++++
88 CID : 8
89 Time Since Last Arrival : 4
90 Arrival Time : 40
91 Service Time : 3
92 Time Server Begins : 41
93 Time Customer waits in Queue : 1
94 Time Service End : 44
95 Time Customer Spends in System : 4
96 Idle Time of Server : 0
97 Random Digit for Service Time : 38
98 Random Digit for Arrival Time : 388
99 ++++++
100 CID : 9
101 Time Since Last Arrival : 2
102 Arrival Time : 42
103 Service Time : 4
104 Time Server Begins : 44
105 Time Customer waits in Queue : 2
106 Time Service End : 48
107 Time Customer Spends in System : 6
108 Idle Time of Server : 0
109 Random Digit for Service Time : 72
110 Random Digit for Arrival Time : 224
111 ++++++
112 CID : 10
113 Time Since Last Arrival : 6
114 Arrival Time : 48
115 Service Time : 4
116 Time Server Begins : 48
117 Time Customer waits in Queue : 0
118 Time Service End : 52
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119 Time Customer Spends in System : 4
120 Idle Time of Server : 0
121 Random Digit for Service Time : 62
122 Random Digit for Arrival Time : 747
123 ++++++
124 CID : 11
125 Time Since Last Arrival : 1
126 Arrival Time : 49
127 Service Time : 3
128 Time Server Begins : 52
129 Time Customer waits in Queue : 3
130 Time Service End : 55
131 Time Customer Spends in System : 6
132 Idle Time of Server : 0
133 Random Digit for Service Time : 51
134 Random Digit for Arrival Time : 114
135 ++++++
136 CID : 12
137 Time Since Last Arrival : 8
138 Arrival Time : 57
139 Service Time : 2
140 Time Server Begins : 57
141 Time Customer waits in Queue : 0
142 Time Service End : 59
143 Time Customer Spends in System : 2
144 Idle Time of Server : 2
145 Random Digit for Service Time : 19
146 Random Digit for Arrival Time : 895
147 ++++++
148 CID : 13
149 Time Since Last Arrival : 3
150 Arrival Time : 60
151 Service Time : 4
152 Time Server Begins : 60
153 Time Customer waits in Queue : 0
154 Time Service End : 64
155 Time Customer Spends in System : 4
156 Idle Time of Server : 1
157 Random Digit for Service Time : 81
158 Random Digit for Arrival Time : 315
159 ++++++
160 CID : 14
161 Time Since Last Arrival : 2
162 Arrival Time : 62
163 Service Time : 5
164 Time Server Begins : 64
165 Time Customer waits in Queue : 2
166 Time Service End : 69
167 Time Customer Spends in System : 7
168 Idle Time of Server : 0
169 Random Digit for Service Time : 90
170 Random Digit for Arrival Time : 203
171 ++++++
172 CID : 15
173 Time Since Last Arrival : 5
174 Arrival Time : 67
175 Service Time : 3
176 Time Server Begins : 69
177 Time Customer waits in Queue : 2
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178 Time Service End : 72
179 Time Customer Spends in System : 5
180 Idle Time of Server : 0
181 Random Digit for Service Time : 55
182 Random Digit for Arrival Time : 531
183 ++++++
184 CID : 16
185 Time Since Last Arrival : 8
186 Arrival Time : 75
187 Service Time : 1
188 Time Server Begins : 75
189 Time Customer waits in Queue : 0
190 Time Service End : 76
191 Time Customer Spends in System : 1
192 Idle Time of Server : 3
193 Random Digit for Service Time : 4
194 Random Digit for Arrival Time : 936
195 ++++++
196 CID : 17
197 Time Since Last Arrival : 1
198 Arrival Time : 76
199 Service Time : 2
200 Time Server Begins : 76
201 Time Customer waits in Queue : 0
202 Time Service End : 78
203 Time Customer Spends in System : 2
204 Idle Time of Server : 0
205 Random Digit for Service Time : 29
206 Random Digit for Arrival Time : 74
207 ++++++
208 CID : 18
209 Time Since Last Arrival : 1
210 Arrival Time : 77
211 Service Time : 5
212 Time Server Begins : 78
213 Time Customer waits in Queue : 1
214 Time Service End : 83
215 Time Customer Spends in System : 6
216 Idle Time of Server : 0
217 Random Digit for Service Time : 92
218 Random Digit for Arrival Time : 116
219 ++++++
220 CID : 19
221 Time Since Last Arrival : 2
222 Arrival Time : 79
223 Service Time : 3
224 Time Server Begins : 83
225 Time Customer waits in Queue : 4
226 Time Service End : 86
227 Time Customer Spends in System : 7
228 Idle Time of Server : 0
229 Random Digit for Service Time : 39
230 Random Digit for Arrival Time : 176
231 ++++++
232 CID : 20
233 Time Since Last Arrival : 3
234 Arrival Time : 82
235 Service Time : 3
236 Time Server Begins : 86
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237 Time Customer waits in Queue : 4
238 Time Service End : 89
239 Time Customer Spends in System : 7
240 Idle Time of Server : 0
241 Random Digit for Service Time : 31
242 Random Digit for Arrival Time : 297
243 ++++++-----
244 average waiting time for a customer : 1.05
245 probably that a customer has to wait in queue : 0.45
246 fraction of idle time of the server : 0.25842696629213485
247 probably of the server being busy : 0.7415730337078652
248 average service time : 3.3
249 expected value : 3.2
250 average time between arrivals : 4.315789473684211
251 discrete uniform distribution : 4.5
252 average waiting time of those who wait : 2.3333333333333335
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
```