

ARENA Simulation Results  
IE - License: STUDENT

Summary for Replication 1 of 4

Project: IE306HW4 Run execution  
date :12/19/2022  
Analyst: Omercan Misirlioglu Model revision  
date:12/19/2022  
Replication ended at time : 480.0 Minutes (Monday, December 19, 2022, 00:50:12)  
Base Time Units: Minutes

TALLY VARIABLES

Identifier	Average	Half Width	Minimum
Maximum Observations			

Time Spent in Service Queue	42.094	(Insuf)	.00000
79.491 188			

DISCRETE-CHANGE VARIABLES

Identifier	Average	Half Width	Minimum
Maximum Final Value			

Utilization of food servers by eng.student	.83634	(Insuf)	.00000
2.0000 1.0000			
Utilization of food servers by Soc.Sci.Stu	1.1042	(Insuf)	.00000
2.0000 1.0000			
Utilization of cashier by eng.students	.46585	(Insuf)	.00000
1.0000 1.0000			
Utilization of cashier by Soc.Sci.Students	.52500	(Insuf)	.00000
1.0000 .00000			
Average Length of Food Service Queue	17.835	(Corr)	.00000
33.000 26.000			
Average Length of Payment to Cashier Queue	28.848	(Corr)	.00000
72.000 71.000			

COUNTERS

Identifier	Count	Limit
Number Of Engineering Students Who Forget	25	Infinite
Number Of Social Sciences Students Who For	20	Infinite

OUTPUTS

Identifier	Value
System.NumberOut	.00000

Beginning replication 2 of 4

ARENA Simulation Results  
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Summary for Replication 2 of 4

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59
60
61
62 Identifier                Average    Half Width  Minimum
63 Maximum    Observations
64
65 Time Spent in Service Queue    22.089    (Insuf)    .00000
66 43.155      199
67
68 DISCRETE-CHANGE VARIABLES
69 Identifier                Average    Half Width  Minimum
70 Maximum    Final Value
71
72 Utilization of food servers by eng.student    .80415    (Insuf)    .00000
73 2.0000      2.0000
74 Utilization of food servers by Soc.Sci.Stu    1.0875    (Insuf)    .00000
75 2.0000      .00000
76 Utilization of cashier by eng.students    .44167    (Insuf)    .00000
77 1.0000      .00000
78 Utilization of cashier by Soc.Sci.Students    .55251    (Insuf)    .00000
79 1.0000      1.0000
80 Average Length of Food Service Queue    9.9163    (Corr)    .00000
81 21.000      19.000
82 Average Length of Payment to Cashier Queue    34.155    (Corr)    .00000
83 78.000      77.000
84
85 COUNTERS
86 Identifier                Count    Limit
87
88 Number Of Engineering Students Who Forget    20    Infinite
89 Number Of Social Sciences Students Who For    22    Infinite
90
91 OUTPUTS
92 Identifier                Value
93
94 System.NumberOut    .00000
95
96 Beginning replication 3 of 4
97
98 ARENA Simulation Results
99 IE - License: STUDENT
100
101 Summary for Replication 3 of 4
102
103 Project: IE306HW4    Run execution
104 date :12/19/2022
105 Analyst: Omercan Misirlioglu    Model revision
106 date:12/19/2022
107
108 Replication ended at time : 480.0 Minutes (Monday, December 19, 2022, 00:50:12)
109 Base Time Units: Minutes
110
111 TALLY VARIABLES
112 Identifier                Average    Half Width  Minimum
113 Maximum    Observations
114
115 Time Spent in Service Queue    11.227    (Insuf)    .00000
116 38.134      202
117
118 DISCRETE-CHANGE VARIABLES

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116	Identifier		Average	Half Width	Minimum
117	Maximum	Final Value			
118					
119	Utilization of food servers by eng.student		.88371	(Insuf)	.00000
120	2.0000 1.0000				
120	Utilization of food servers by Soc.Sci.Stu		.93318	(Insuf)	.00000
121	2.0000 1.0000				
121	Utilization of cashier by eng.students		.46454	(Insuf)	.00000
122	1.0000 1.0000				
122	Utilization of cashier by Soc.Sci.Students		.53125	(Insuf)	.00000
123	1.0000 .00000				
123	Average Length of Food Service Queue		4.7592	(Corr)	.00000
124	16.000 3.0000				
124	Average Length of Payment to Cashier Queue		38.013	(Corr)	.00000
125	81.000 81.000				
126					
127					
128	Identifier		Count	Limit	
129					
130					
131	Number Of Engineering Students Who Forget		21	Infinite	
132	Number Of Social Sciences Students Who For		27	Infinite	
133					
134					
135					
136	Identifier		Value		
137					
138					
139	System.NumberOut		.00000		
140					
141	Beginning replication 4 of 4				
142					
143					
144					
145					
146					
147					
148	Project: IE306HW4				Run execution
149	date :12/19/2022				
150	Analyst: Omercan Misirlioglu				Model revision
151	date:12/19/2022				
152	Replication ended at time				
153	Base Time Units: Minutes				
154					
155					
156	Identifier		Average	Half Width	Minimum
157	Maximum	Observations			
158					
159	Time Spent in Service Queue		38.113	(Insuf)	.00000
160	80.819 197				
161					
162					
163	Identifier		Average	Half Width	Minimum
164	Maximum	Final Value			
165					
166	Utilization of food servers by eng.student		.76172	(Insuf)	.00000
167	2.0000 1.0000				
167	Utilization of food servers by Soc.Sci.Stu		1.1014	(Insuf)	.00000
168	2.0000 1.0000				
168	Utilization of cashier by eng.students		.39167	(Insuf)	.00000
169	1.0000 .00000				
169	Utilization of cashier by Soc.Sci.Students		.59291	(Insuf)	.00000
	1.0000 1.0000				

170 **Average Length** of Food Service Queue 17.659 (Corr) .00000  
38.000 29.000  
171 **Average Length** of Payment to Cashier Queue 30.036 (Corr) .00000  
74.000 73.000

172  
173 COUNTERS  
174  
175 Identifier Count Limit  
176  
177  
178 Number Of Engineering Students Who Forget 14 Infinite  
179 Number Of Social Sciences Students Who For 23 Infinite

180  
181 OUTPUTS  
182  
183 Identifier Value  
184  
185  
186 System.NumberOut .00000  
187  
188

189 ARENA Simulation Results  
190 IE - License: STUDENT  
191  
192 Output Summary for 4 Replications  
193  
194 Project: IE306HW4 Run execution  
date :12/19/2022  
195 Analyst: Omercan Misirlioglu Model revision  
date:12/19/2022

196  
197  
198 OUTPUTS  
199  
200 Identifier **Average** Half-width Minimum Maximum  
# Replications  
201  
202  
203 System.NumberOut .00000 .00000 .00000  
.00000 4

204  
205 Simulation run time: 0.02 minutes.  
206 Simulation run complete.  
207