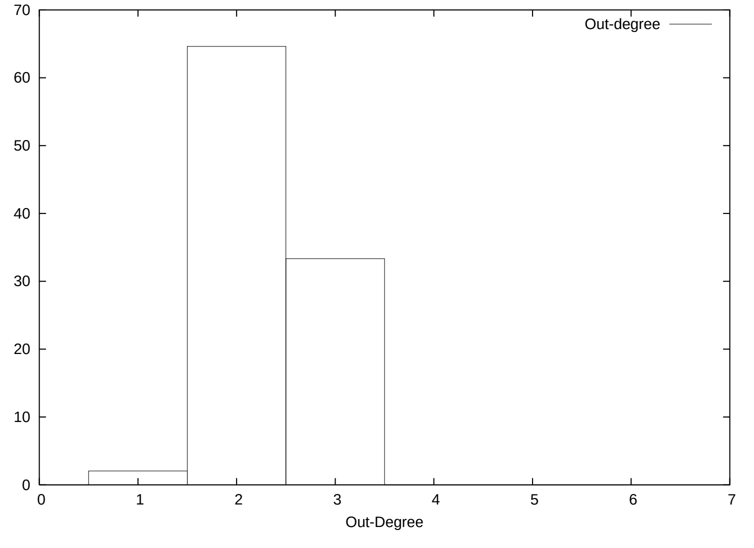
Graph: murphi/peterson3

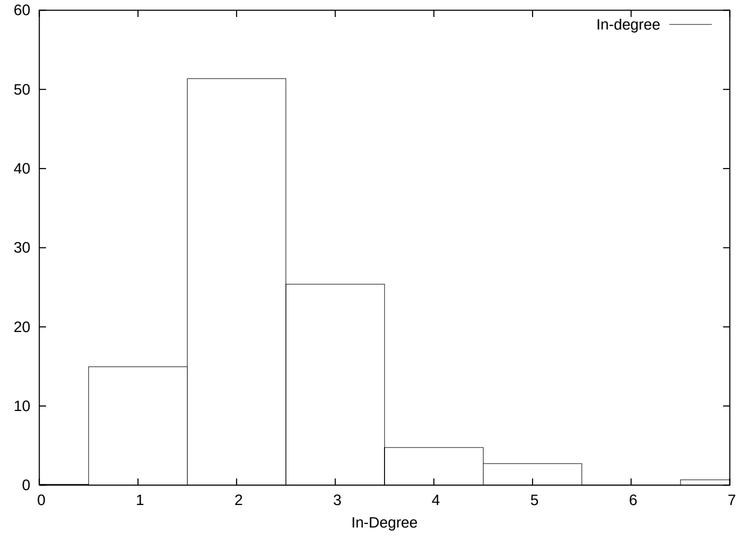
General Info

Example title	Peterson's mutual exclusion alg.
Parameter	
Reduction	
Modification	
States	882
Edges	2,040
Average degree	2.3

Out-Degrees distribution:



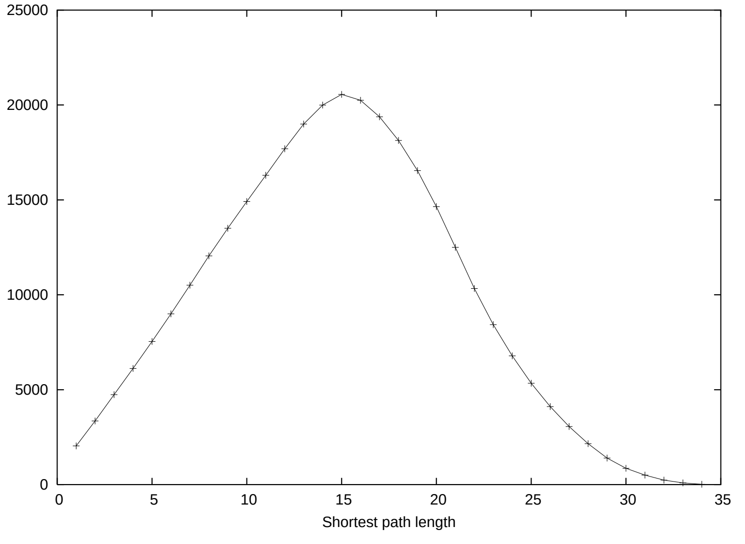
In-Degrees distribution:



Shortest Paths Info

Diameter: 34
Average shortest path length: 14.6439

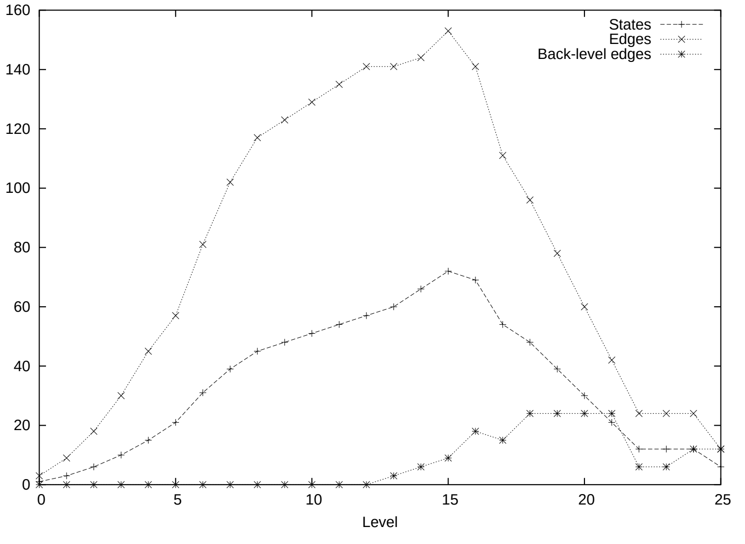
Shortest paths lengths frequencies:



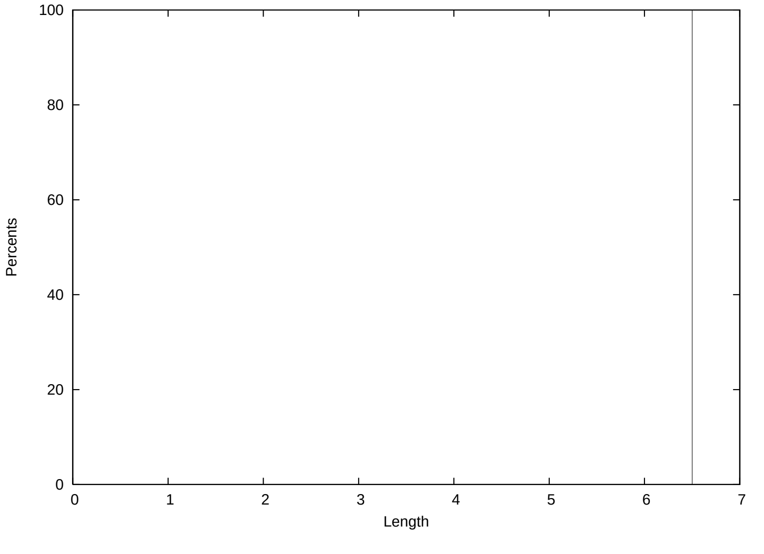
BFS Info

BFS height	25
BFS width	72 (8.1%)
Back level edges	183 (8.9%)

BFS level info:



Back level edges lengths:



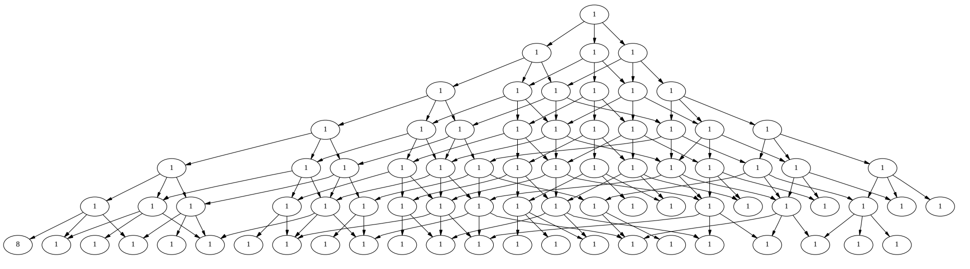
SCC Info

SCC components	382
SCC quetient height	21
SCC quetient nontrivial height	6
Number of terminal components	1
The largest component is	the only terminal

Statistics according to **sizes**:

Size	Number of components	Number of states here
327	1	37%
16	6	10.8%
8	12	10.8%
1	363	41.1%

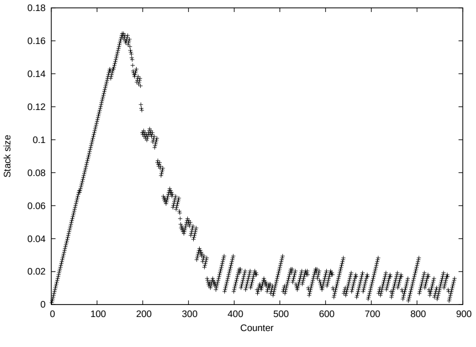
SCC component graph (part):



DFS Info

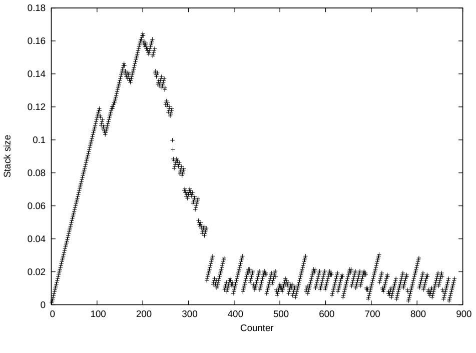
Run 0

front-edges : back-edges : cross-edges = 881 : 96 : 1,063 = 43.1%:4.7%:52.1%
Max. stack size: 145 (16.4%)
Shortest cycle detected: 8
Most often detected lengths of cycles: 24 (31), 32 (20), 8 (12), 48 (9), 96 (7)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 881 : 104 : 1,055 = 43.1%:5%:51.7%
Max. stack size: 145 (16.4%)
Shortest cycle detected: 8
Most often detected lengths of cycles: 48 (21), 24 (17), 32 (16), 8 (12), 120 (7)
Stack graph:



Local Structure

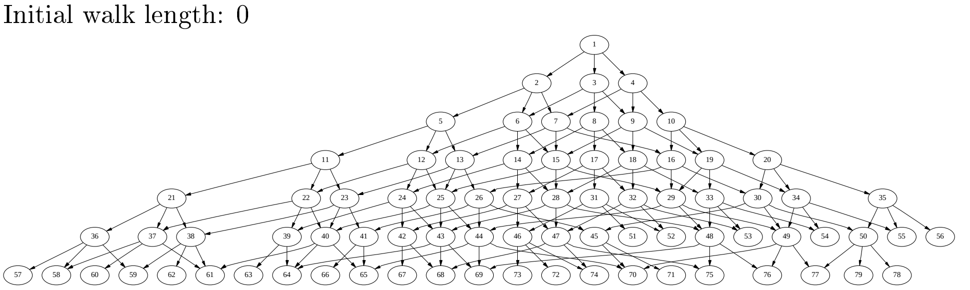
Short cycles(up to 6)
none
Diamonds

830 (94.1%)

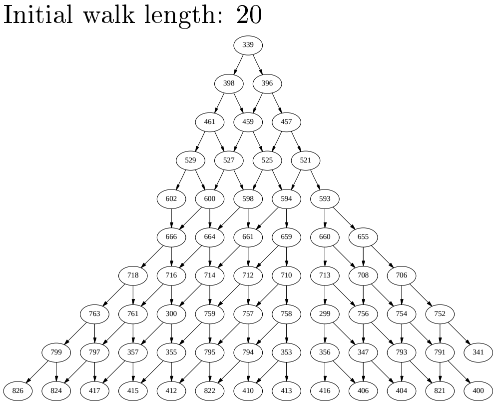
Neighborhoods

k	avg size	avg clustering
1	3.3	1
2	7.1	1.2
3	12.4	1.3
4	19.4	1.4

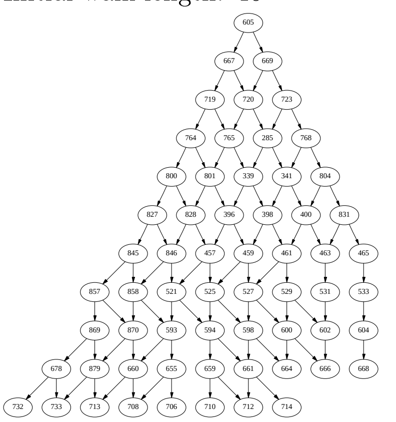
Visualization of some parts of the state state space:
Initial walk length: 0



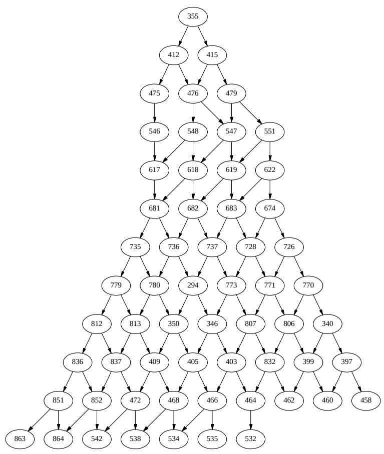
Initial walk length: 20



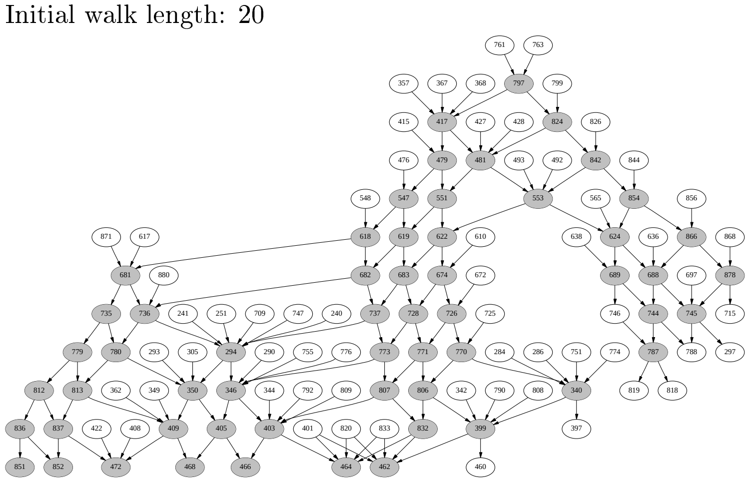
Initial walk length: 40



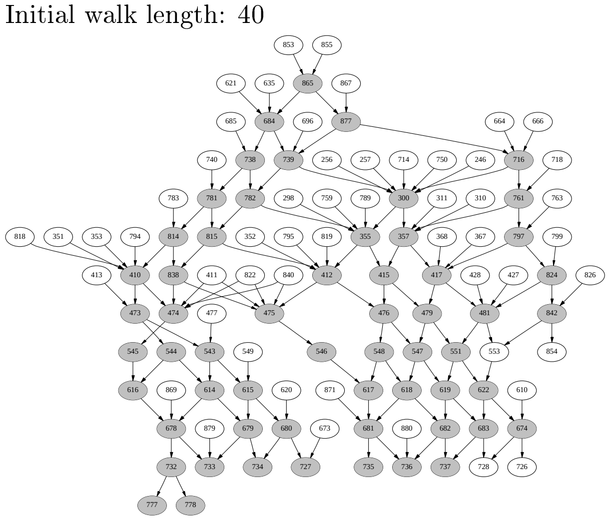
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60