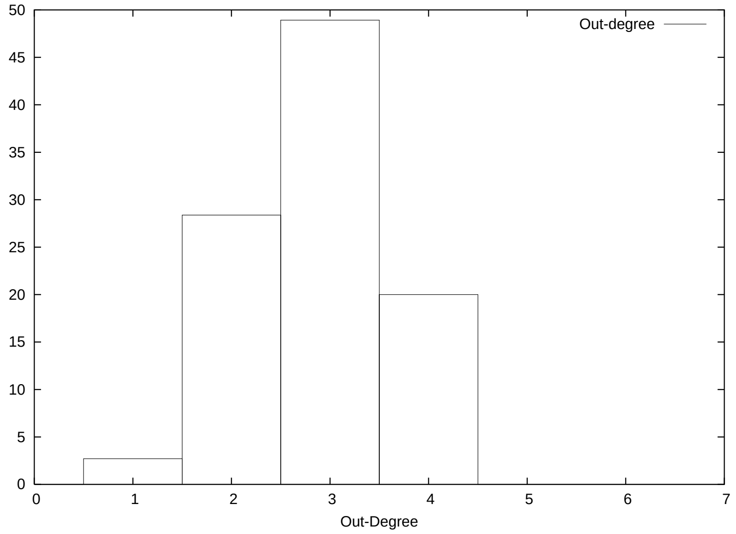
Graph: murphi/ldash

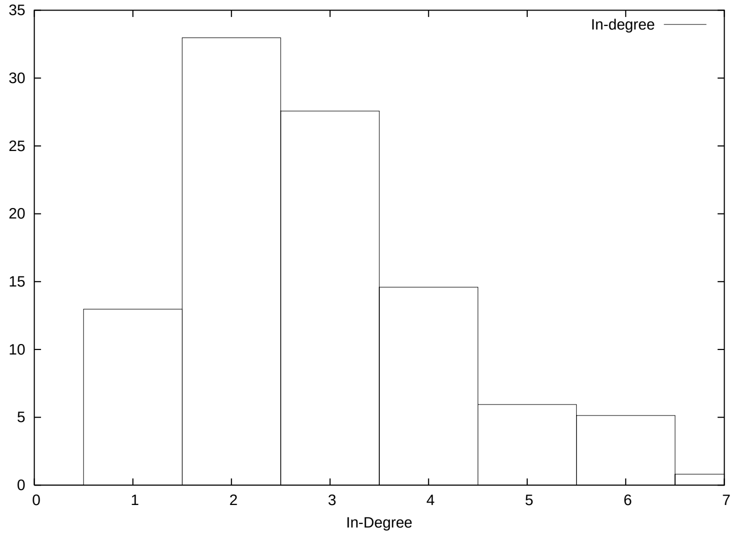
General Info

Example title	Dash protocol
Parameter	several variants, 1500 lines of code
Reduction	2,1
Modification	
States	740
Edges	2,118
Average degree	2.8

Out-Degrees distribution:



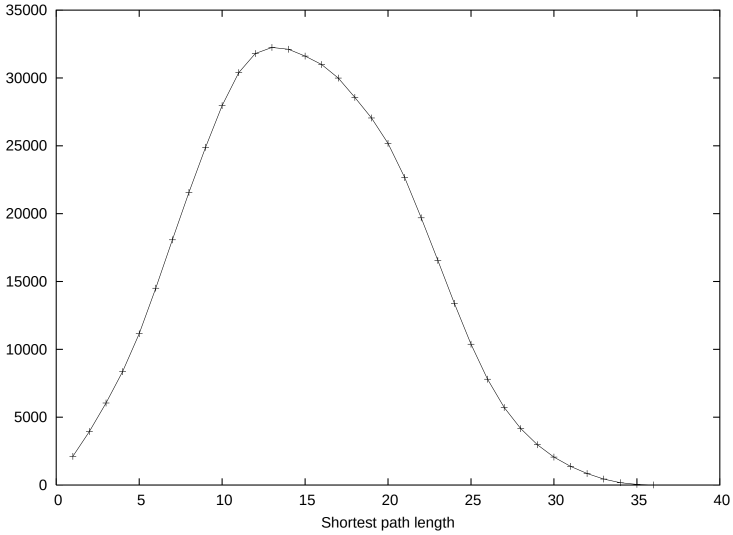
In-Degrees distribution:



Shortest Paths Info

Diameter: 36
Average shortest path length: 14.973

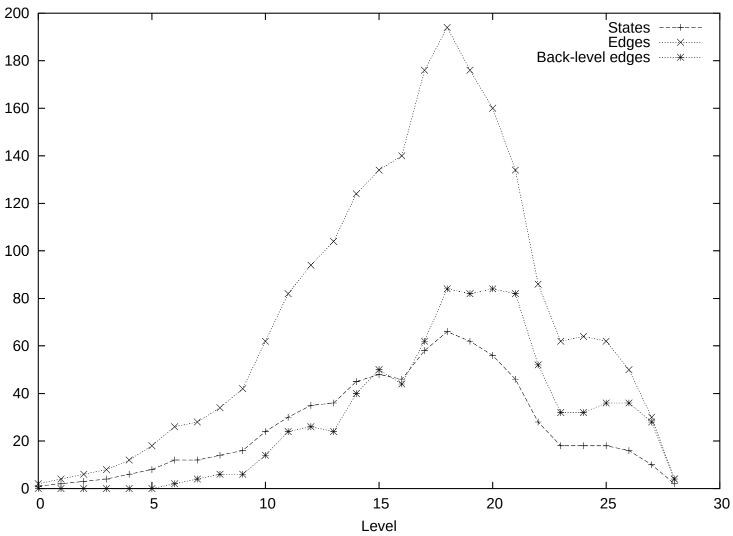
Shortest paths lengths frequencies:



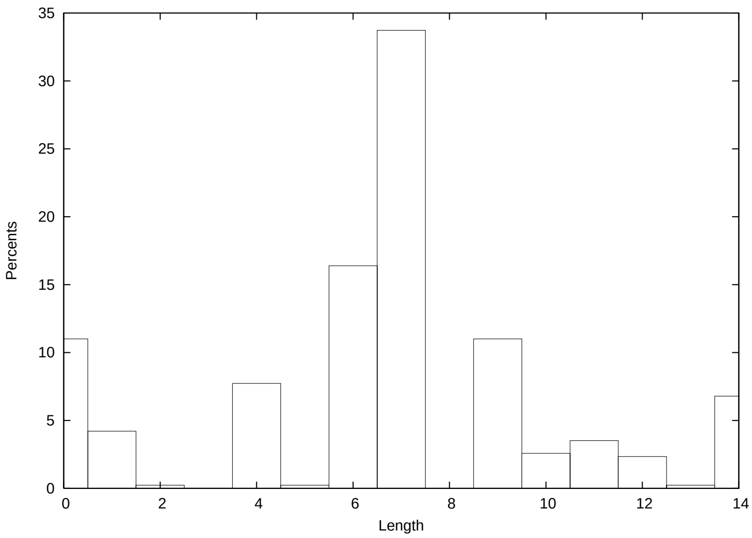
BFS Info

BFS height	28
BFS width	66 (8.9%)
Back level edges	854 (40.3%)

BFS level info:



Back level edges lengths:



SCC Info

SCC components	1
SCC quetient height	0
SCC quetient nontrivial height	0
Number of terminal components	1
The largest component is	initial the only terminal

Statistics according to **sizes**:

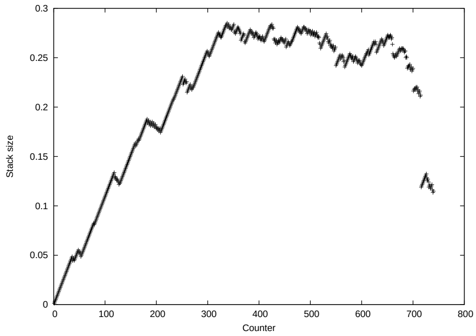
Size	Number of components	Number of states here
740	1	100%

SCC component graph (part):

DFS Info

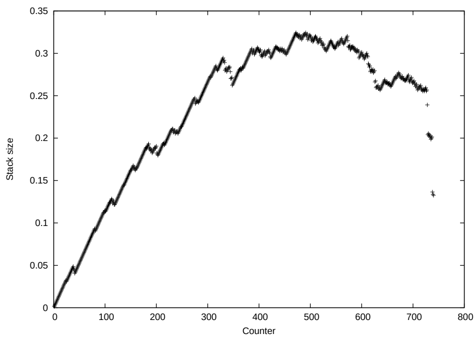
Run 0

front-edges : back-edges : cross-edges = 739 : 491 : 888 = 34.8%:23.1%:41.9%
Max. stack size: 211 (28.5%)
Shortest cycle detected: 7
Most often detected lengths of cycles: 115 (20), 152 (20), 58 (17), 11 (16), 7 (14)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 739 : 501 : 878 = 34.8%:23.6%:41.4%
Max. stack size: 240 (32.4%)
Shortest cycle detected: 7
Most often detected lengths of cycles: 33 (13), 7 (13), 12 (13), 145 (13), 11 (12)
Stack graph:



Local Structure

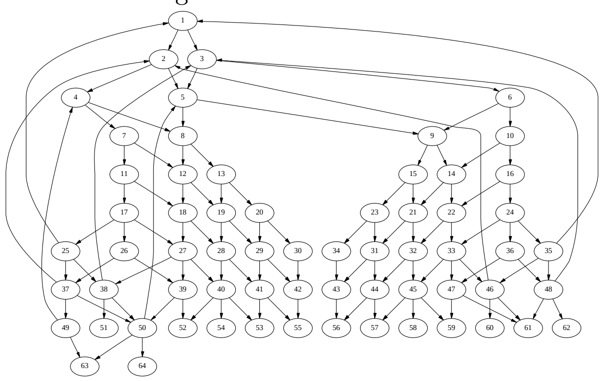
Short cycles(up to 6)
none
Diamonds

699 (94.4%)

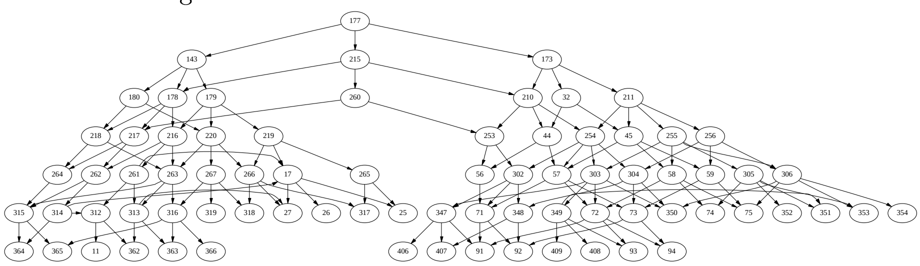
Neighborhoods

k	avg size	avg clustering
1	3.8	1
2	9.2	1.2
3	17.3	1.5
4	28.6	1.6

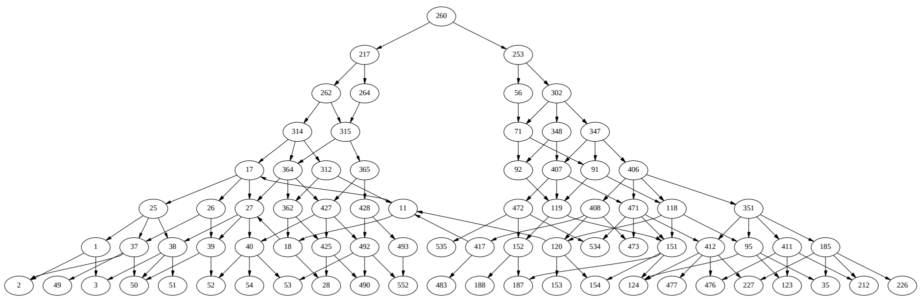
Visualization of some parts of the state state space:
Initial walk length: 0



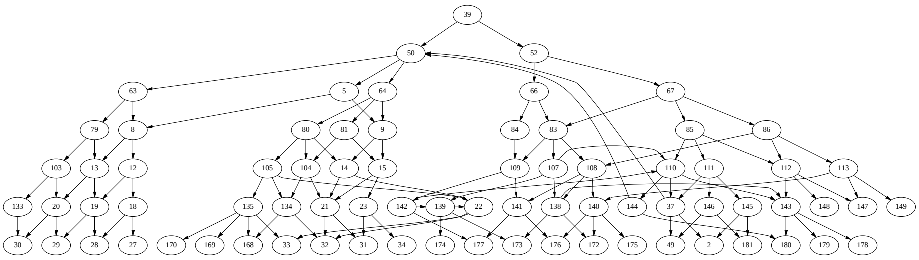
Initial walk length: 20



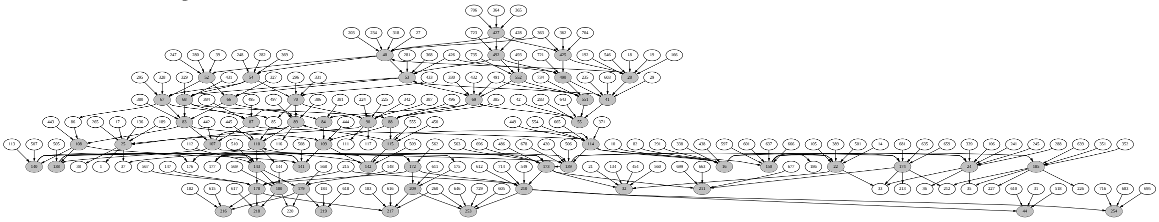
Initial walk length: 40



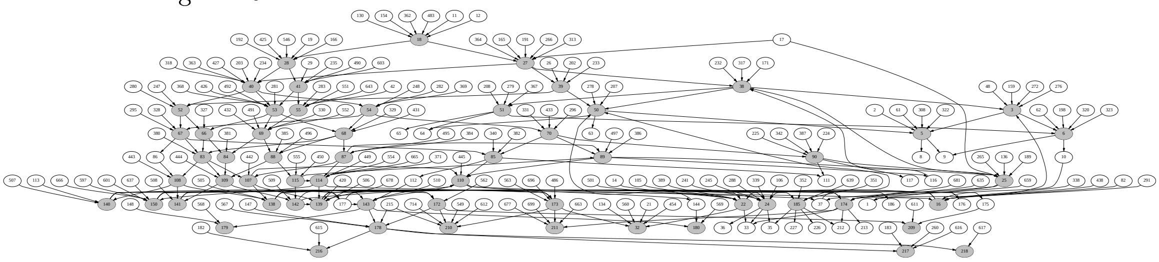
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60