

Monolithic Results

Instance Name	A*(GNN)			BFS		
	Length.	Nodes	Time[ms]	Length.	Nodes	Time[ms]
Assemble_B10-pl.5	–	–	TO	–	–	TO
Assemble_B2-pl.5	5	14	285	5	14	287
Assemble_B4-pl.5	5	14	330	5	14	357
Assemble_B6-pl.5	5	14	1127	5	14	1190
Assemble_B8-pl.5	5	14	48340	5	14	49503
Assemble_B9-pl.5	–	–	TO	–	–	TO
Assemble_C-pl.5	5	14	238	5	14	257
CC_2.2.3-pl.3	3	9	181	4	10	184
CC_2.2.3-pl.5	5	77	684	7	28	255
CC_2.2.3-pl.7	7	558	4358	44	363	2249
CC_2.2.3-pl.8	8	2539	27312	–	–	TO
CC_2.2.4-pl.3	3	11	373	4	9	370
CC_2.2.4-pl.4	4	23	778	7	28	866
CC_2.2.4-pl.6	6	363	9536	13	79	2764
CC_2.2.4-pl.7	7	2084	45668	–	–	TO
CC_2.3.4-pl.4	4	42	12130	24	201	49087
CC_2.3.4-pl.5	5	127	45028	13	85	27215
CC_2.3.4-pl.6	6	675	124726	29	256	56262
CC_3.2.3-pl.3	3	14	318	9	48	533
CC_3.2.3-pl.6	6	367	6443	6	21	323
CC_3.2.3-pl.7	7	1548	26110	–	–	TO
CC_3.3.3-pl.3	3	15	790	5	17	828
CC_3.3.3-pl.5	5	253	8316	18	137	3073
CC_3.3.3-pl.6	6	1942	73680	31	279	5961
CC_3.3.3-pl.7	7	11726	405444	–	–	TO
Coin_in_the_Box-pl.2	2	2	109	2	2	106
Coin_in_the_Box-pl.5	5	78	728	5	16	265
Coin_in_the_Box-pl.7	7	1793	17758	–	–	TO
SC_4.1-pl.5	5	17	93	–	–	TO
SC_4.2-pl.5	5	30	184	–	–	TO
SC_4.2-pl.8	8	184	923	–	–	TO
SC_4.3-pl.6	6	21	93	–	–	TO
SC_4.3-pl.8	8	59	177	–	–	TO

SC_4.4-pl.5	5	17	91	–	–	TO
SC_8.10-pl.8	8	485	4121	–	–	TO
SC_8.10-pl.9	9	1772	16936	–	–	TO
SC_8.10-pl.12	12	35063	281914	–	–	TO
SC_9.11-pl.4	4	8	139	6	13	150
SC_9.11-pl.5	5	11	122	8	21	189
SC_9.11-pl.7	7	41	326	1286	15107	202732
SC_9.11-pl.9	9	237	2041	–	–	TO
SC_9.11-pl.10	10	657	6013	–	–	TO
SC_9.11-pl.11	11	1272	12372	–	–	TO
SC_10.8-pl.9	–	–	TO	–	–	TO
SC_10.8-pl.14	14	93	572	16	33	252
SC_10.10-pl.2	2	6	311	3	8	315
SC_10.10-pl.3	3	10	347	–	–	TO
SC_10.10-pl.9	9	10	117	9	10	132
SC_10.10-pl.9	9	1248	32644	12	57	1589
SC_10.10-pl.10	10	15	161	11	17	176
SC_10.10-pl.13	13	17305	472785	–	–	TO
SC_10.10-pl.14	–	–	TO	–	–	TO
SC_10.10-pl.17	17	942	7546	–	–	TO
SC_10.10-pl.17	–	–	TO	–	–	TO
avg± std (all)	7 ± 3	1711 ± 5628	34711 ± 94709	55 ± 233	583 ± 2746	14051 ± 39043
iqr± iqr (all)	6 ± 3	156 ± 661	3908 ± 16651	8 ± 8	27 ± 65	830 ± 2509
avg± std (comm)	5 ± 2	209 ± 424	12858 ± 27539	55 ± 233	583 ± 2746	14051 ± 39043
iqr± iqr (comm)	5 ± 2	40 ± 113	1716 ± 8031	8 ± 8	27 ± 65	830 ± 2509
Solved Instances		49/54 (90.74%)			29/54 (53.70%)	

Table 1: Comparison of execution on the domain over the **Test** instances. The model used by A*(GNN) has been trained using the instances reported in the previous **Train** Table.