Puzzle - H1	Iterations/nodes	# of Moves	H2	Iterations/nodes	# of Moves	H3	Iterations/nodes	# of Moves
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 24, 20, 21, 0, 22, 23]	18502	21		1004	21		1070	21
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17, 14, 23, 15, 16, 13, 24, 19, 20, 21, 22, 18, 0, 12]	10210	20		2736	20		1938	20
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 22, 17, 20, 0, 24, 21, 18, 23, 19]	205300	28		8099	28		68433	28
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 0, 16, 17, 18, 14, 20, 21, 22, 23, 19, 24]	26402	25		2337	25		8800	25
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 0, 16, 17, 13, 18, 20, 21, 22, 23, 19, 24]	287266	29		11886	29		95755	29
[1, 2, 3, 4, 5, 6, 7, 8, 10, 0, 11, 12, 13, 9, 15, 16, 17, 18, 14, 20, 21, 22, 23, 19, 24]	158225	30		too long	30		52741	30
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 20, 16, 17, 18, 14, 0, 21, 22, 23, 19, 24]	25252	24		1582	24		8417	24
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 0, 16, 17, 18, 14, 20, 21, 22, 23, 19, 24]	26402	25		2405	25		8800	25
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 0, 16, 17, 18, 14, 20, 21, 22, 23, 19, 24]	26402	25		2237	25		8800	25
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 14, 10, 16, 17, 19, 24, 15, 20, 21, 18, 22, 23]	319272	30		4351	30		106424	30
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 24, 23, 20, 21, 22, 19, 0]	207433	27		6982	27		69144	27
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 15, 10, 16, 17, 18, 14, 20, 21, 22, 23, 19, 24]	26402	27		too long	27		8800	27
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 13, 14, 15, 10, 16, 12, 17, 18, 20, 21, 22, 23, 19, 24]	799737	33		48073	33		266579	33
[1, 2, 3, 4, 0, 6, 7, 9, 10, 5, 11, 12, 8, 14, 15, 16, 17, 13, 18, 20, 21, 22, 23, 19, 24]	104361	31		too long	31		34787	31
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 15, 10, 16, 17, 18, 14, 20, 21, 22, 23, 19, 24]	26402	26		5686	26		8800	26
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 21, 16, 18, 23, 19, 20, 0, 17, 22, 24]	763594	28		4308	28		254531	28
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 22, 17, 18, 0, 20, 21, 23, 19, 24]	659519	30		3532	30		219839	30
[1, 2, 4, 9, 5, 6, 8, 13, 3, 10, 12, 16, 7, 14, 15, 0, 11, 23, 18, 24, 21, 17, 22, 20, 19]	2253	22		227	22		751	22
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 20, 13, 15, 16, 18, 23, 22, 24, 21, 0, 17, 14, 19]	9215	20		501	20		3071	20
[1, 2, 3, 4, 5, 6, 7, 8, 9, 15, 10, 16, 13, 14, 20, 12, 11, 23, 18, 24, 21, 17, 22, 0, 19]	799456	30		too long	30		266485	30
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 20, 16, 17, 0, 19, 23, 21, 22, 18, 24, 14]	506657	26		10775	26		168885	26
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 15, 10, 16, 17, 19, 24, 20, 21, 22, 18, 14, 23]	305957	30		3421	30		101985	30
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 14, 22, 10, 16, 19, 18, 17, 15, 21, 23, 13, 24, 20]	24123	26		2444	26		8041	26
[1, 2, 3, 4, 0, 6, 12, 17, 9, 5, 11, 8, 14, 18, 10, 16, 13, 7, 20, 15, 21, 22, 23, 19, 24]	16098	27		788	27		5366	27
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 15, 10, 16, 17, 18, 14, 24, 21, 22, 23, 20, 19]	12524	24		1790	24		4174	24
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17, 12, 14, 15, 21, 16, 13, 18, 0, 20, 22, 23, 19, 24]	196079	28		7593	28		65359	28
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 14, 10, 16, 17, 23, 18, 15, 20, 21, 22, 19, 24]	323159	31		9447	31		107719	31
[1, 2, 3, 4, 5, 6, 7, 9, 14, 10, 11, 13, 17, 8, 15, 22, 21, 0, 23, 20, 16, 18, 19, 12, 24]	12170	22		452	22		4056	22
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 14, 10, 16, 22, 17, 19, 15, 20, 21, 18, 23, 24]	748621	33		9161	33		249540	33
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 0, 20, 21, 22, 23, 24]	32789	24		1913	24		10929	24
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 14, 10, 16, 22, 17, 18, 15, 24, 21, 23, 20, 19]	95738	29		2453	29		31912	29
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 21, 16, 18, 20, 19, 24, 17, 0, 22, 23]	44689	23		19155	23		14896	23
[1, 2, 3, 4, 5, 7, 8, 12, 9, 10, 6, 17, 14, 23, 15, 11, 16, 18, 19, 20, 21, 22, 13, 0, 24]	13321	22		1096	22		4440	22
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 23, 18, 0, 20, 21, 22, 19, 24]	315419	28		9462	28		105139	28
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 0, 21, 16, 23, 18, 15, 20, 17, 22, 19, 24]	24791	25		914	25		8263	25
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 14, 10, 21, 16, 18, 19, 15, 20, 17, 22, 23, 24]	691651	32		2081	32		230550	32
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 15, 10, 16, 17, 19, 14, 20, 21, 22, 18, 23, 24]	730848	33		3358	33		243616	33
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 23, 19, 24, 21, 22, 18, 0]	752243	29		6128	29		250747	29
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 17, 12, 14, 10, 21, 16, 13, 18, 15, 20, 22, 23, 19, 24]	195386	30		7582	30		65128	30
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 21, 19, 20, 0, 16, 22, 18, 23, 24]	2495	20		405	20		831	20
[1, 2, 0, 4, 5, 6, 14, 3, 8, 10, 11, 7, 17, 9, 15, 16, 13, 12, 18, 24, 21, 22, 23, 20, 19]	2025	19		213	19		675	19
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 23, 12, 14, 15, 16, 17, 20, 13, 19, 21, 22, 0, 24, 18]	285616	25		3194	25		95205	25
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 24, 0, 21, 22, 18, 23, 19]	4802	20		1276	20		1600	20

List								
[0, 2, 3, 4, 5, 8, 1, 6, 9, 10, 11, 7, 12, 22, 15, 16, 23, 14, 13, 20, 21, 17, 19, 18, 24]	323902	29		8710	29		107967	29
[1, 2, 3, 4, 5, 6, 7, 9, 14, 0, 11, 13, 8, 15, 10, 16, 12, 17, 19, 23, 21, 22, 18, 24, 20]	too long			46691	41		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 0, 16, 17, 19, 14, 20, 21, 22, 18, 23, 24]	730848	32		3358	32		243616	32
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 14, 10, 16, 21, 17, 24, 15, 20, 19, 18, 22, 23]	762964	30		5993	30		254321	30
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 14, 19, 10, 16, 18, 23, 22, 15, 20, 21, 17, 13, 24]	too long			35736	43		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 15, 10, 16, 17, 19, 24, 20, 21, 22, 18, 14, 23]	305957	31		3421	31		101985	31
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 0, 16, 17, 19, 14, 20, 21, 22, 18, 23, 24]	730848	33		3358	33		243616	33
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 24, 15, 22, 17, 20, 0, 16, 21, 18, 23, 19]	too long			72623	43		too long	
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 15, 10, 16, 17, 19, 14, 20, 21, 22, 18, 23, 24]	730848	31		3358	31		243616	31
[1, 2, 3, 4, 5, 6, 7, 9, 14, 10, 11, 16, 17, 8, 15, 21, 12, 18, 23, 24, 20, 22, 13, 0, 19]	too long			2656	35		too long	
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 15, 10, 16, 17, 18, 20, 19, 21, 22, 14, 24, 23]	274837	28		21037	28		91612	28
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16, 13, 14, 15, 21, 11, 22, 18, 19, 20, 17, 23, 0, 24]	too long			2400	33		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 21, 16, 18, 19, 24, 20, 17, 22, 0, 23]	689917	20		2097	20		229972	20
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 19, 18, 15, 16, 17, 14, 24, 23, 21, 22, 20, 0, 13]	11696	28		2506	28		3898	28
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 24, 0, 20, 21, 18, 22, 23]	355651	28		4164	28		118550	28
[1, 8, 4, 9, 5, 7, 3, 13, 2, 10, 6, 11, 14, 0, 15, 17, 21, 18, 12, 24, 16, 22, 23, 20, 19]	too long			2714	35		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 22, 0, 20, 21, 23, 19, 24]	336126	31		3126	31		112042	31
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 24, 15, 17, 18, 20, 19, 16, 21, 22, 23, 0]	too long			60018	42		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 0, 21, 16, 18, 19, 15, 20, 17, 22, 23, 24]	773628	28		2050	28		257876	28
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 21, 17, 14, 0, 22, 11, 12, 18, 15, 20, 16, 23, 19, 24]	too long			6543	42		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 20, 16, 17, 14, 18, 24, 21, 22, 0, 19, 23]	too long			31092	34		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 21, 18, 19, 0, 20, 16, 22, 23, 24]	too long			5787	37		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16, 14, 22, 15, 21, 11, 13, 24, 23, 20, 18, 17, 0, 19]	too long			2120	35		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 0, 24, 21, 22, 23, 19]	201584	32		4266	32		67194	32
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 16, 11, 12, 17, 0, 13, 23, 18, 20, 15, 21, 22, 19, 14, 24]	too long			4566	36		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 15, 10, 16, 17, 19, 14, 20, 21, 22, 18, 23, 24]	730848	31		3358	31		243616	31
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 14, 10, 16, 23, 22, 18, 15, 20, 21, 17, 19, 24]	too long			8473	35		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 20, 21, 16, 18, 19, 24, 17, 0, 22, 14, 23]	too long			18852	42		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 0, 16, 17, 19, 14, 20, 21, 22, 18, 23, 24]	730848	33		3358	33		243616	33
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 15, 10, 16, 17, 19, 14, 20, 21, 22, 18, 23, 24]	730848	31		3358	31		243616	31
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 19, 21, 17, 13, 15, 22, 11, 14, 20, 24, 12, 16, 0, 18, 23]	too long			3059	42		too long	
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 14, 10, 17, 21, 23, 24, 15, 20, 16, 22, 18, 19]	too long			49615	42		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 0, 16, 23, 18, 14, 20, 21, 17, 22, 19, 24]	665279	32		4115	32		221759	32
[1, 7, 2, 3, 5, 6, 9, 14, 8, 10, 11, 13, 4, 24, 0, 16, 12, 17, 19, 15, 21, 22, 18, 23, 20]	too long			5222	38		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 0, 16, 22, 17, 19, 15, 20, 21, 18, 23, 24]	too long			8004	34		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 20, 15, 0, 16, 17, 14, 13, 24, 21, 22, 18, 23, 19]	too long			30181	40		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 13, 17, 14, 10, 21, 16, 12, 20, 15, 24, 22, 18, 23, 19]	666516	32		12645	32		222172	32
[1, 2, 3, 4, 5, 6, 12, 7, 9, 10, 16, 11, 8, 13, 15, 21, 17, 19, 14, 24, 20, 22, 18, 0, 23]	too long			5039	37		too long	
[1, 2, 3, 4, 5, 11, 6, 14, 8, 10, 17, 16, 9, 18, 0, 7, 13, 23, 20, 15, 21, 22, 19, 12, 24]	too long			3979	36		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 15, 10, 16, 17, 19, 14, 20, 21, 22, 18, 23, 24]	730848	32		3358	32		243616	32
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 14, 10, 21, 16, 18, 19, 15, 20, 17, 22, 23, 24]	691651	27		2081	27		230550	27
[1, 2, 3, 4, 0, 6, 7, 8, 9, 5, 11, 12, 13, 14, 10, 22, 21, 18, 24, 15, 20, 16, 19, 17, 23]	too long			8894	40		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 0, 21, 16, 23, 24, 15, 20, 17, 22, 18, 19]	too long			2941	34		too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 17, 12, 14, 10, 21, 16, 13, 24, 15, 20, 22, 23, 18, 19]	too long			24356	41		too long	

Puzzle	Col1	Col2	Col3	Col4	Col5	Col6	Col7	Col8	Col9
[1, 2, 3, 4, 5, 11, 6, 8, 9, 0, 7, 12, 13, 14, 10, 22, 21, 17, 18, 15, 20, 16, 23, 19, 24]	too long					6537	39	too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 13, 14, 10, 15, 22, 17, 20, 24, 16, 21, 18, 23, 19]	too long					50163	45	too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 19, 13, 15, 16, 22, 17, 23, 0, 20, 21, 18, 24, 14]	too long					55574	41	too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 0, 14, 15, 16, 12, 17, 24, 18, 20, 21, 19, 22, 23]	568418	30				7525	30	189472	30
[1, 2, 3, 4, 5, 7, 11, 8, 9, 10, 6, 16, 22, 13, 15, 20, 21, 12, 18, 0, 24, 23, 17, 14, 19]	too long					79457	49	too long	
[1, 2, 3, 4, 5, 6, 7, 9, 13, 10, 11, 12, 19, 8, 15, 16, 18, 22, 14, 0, 20, 21, 17, 23, 24]	too long					43765	43	too long	
[2, 0, 3, 4, 5, 1, 6, 8, 9, 10, 11, 7, 12, 14, 15, 16, 17, 13, 18, 24, 20, 21, 22, 19, 23]	784650	30				2289	30	261550	30
[1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 11, 12, 14, 18, 10, 16, 22, 17, 13, 15, 20, 21, 23, 19, 24]	too long					20705	39	too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 21, 18, 17, 24, 0, 20, 16, 23, 22, 19]	too long					28893	39	too long	
[1, 2, 3, 4, 5, 6, 7, 9, 13, 10, 11, 19, 8, 15, 20, 22, 12, 0, 17, 24, 16, 21, 18, 14, 23]	too long					13424	41	too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 21, 0, 19, 24, 20, 16, 22, 23, 18]	too long					8247	35	too long	
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 20, 16, 17, 19, 14, 0, 21, 22, 18, 23, 24]	762959	32				3358	32	254319	32
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 17, 15, 0, 16, 12, 19, 14, 20, 21, 22, 18, 23, 24]	too long					21204	38	too long	
Total runtime of all 100 puzzles was ~1 hour						Total runtime of all 100 puzzles was 681.6 s		Total runtime of all 100 puzzles was	
Please refer to old tables for average runtimes									