

THE GAME

[ai] explore!



How to play [ai] explore! game?

Moving around the board

You can move step by step, but in such a way that each step brings you closer to the goal (a step can be one move from rectangle to rectangle, to the right or down). You can't move diagonally!

Rules of the game

- The path starts in the upper left corner of the board and ends in the lower right corner of the board.
- Each rectangle has its own colour, and each colour that you find on your path carries a certain number of points, depending on its warmth (the warmest - red carries 5 points, yellow 4 points, green 3 points, blue 2 points and the coldest - purple 1 point)

The goal is to find the optimal path: the shortest path from the start to the goal that brings the most points. When you find it, mark it with a pencil and calculate how many points you have collected!

How to check your solution?

The booklet in front of you contains 30 games of different levels: researcher beginner, researcher, experienced researcher. For each level, 10 games are given, and after these 10 games, their solutions are also given (one of the optimal paths and the maximal number of points). Although there are many almost optimal solutions, optimal solutions are only a few and, in most cases, only one solution.

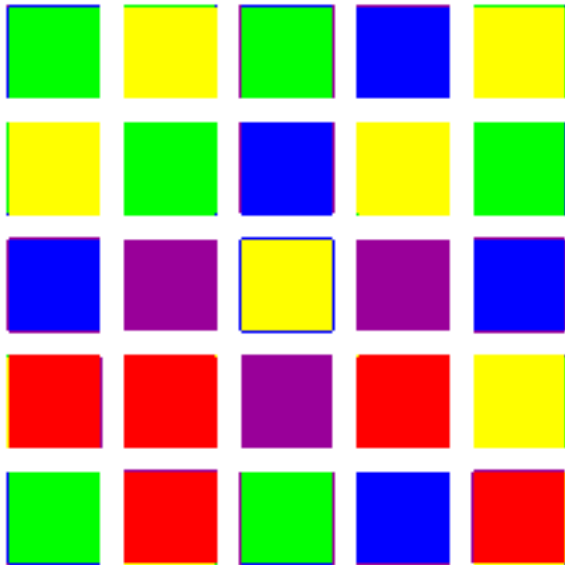
How to generate more games?

If these 30 games we have prepared are not enough for you, no problem! You can just generate more than 300 more games. How?

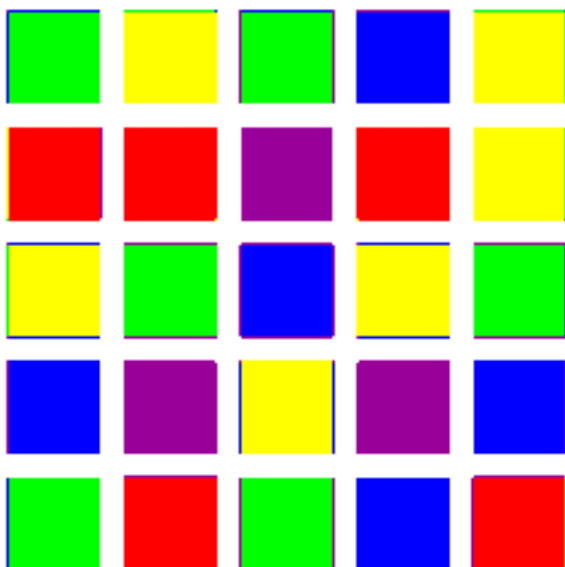
After the solution table, you can find everything you need to generate a new game (individual rows, instructions for composing a new game by composing individual rows). After you have composed a new game and played it, check the solution in the table that follows.

GAMES (LEVEL: researcher beginner)

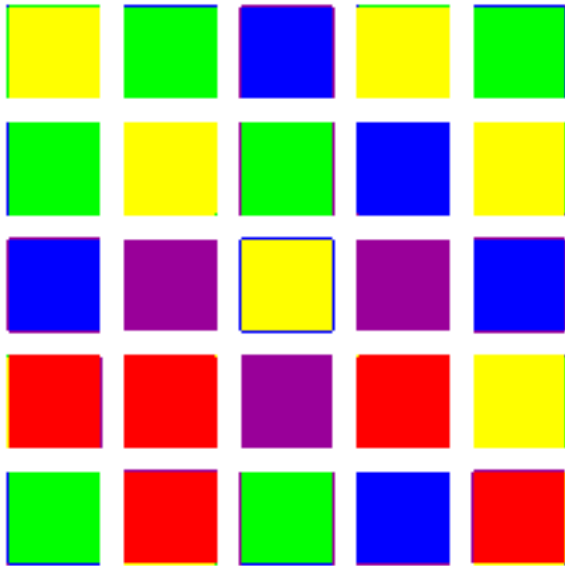
GAME B1



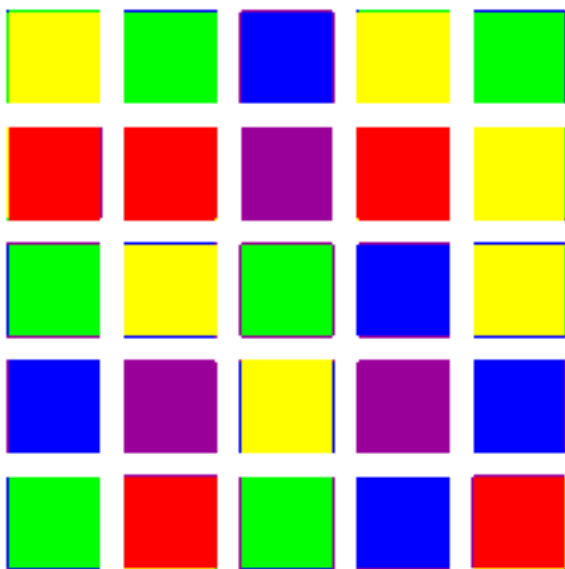
GAME B2



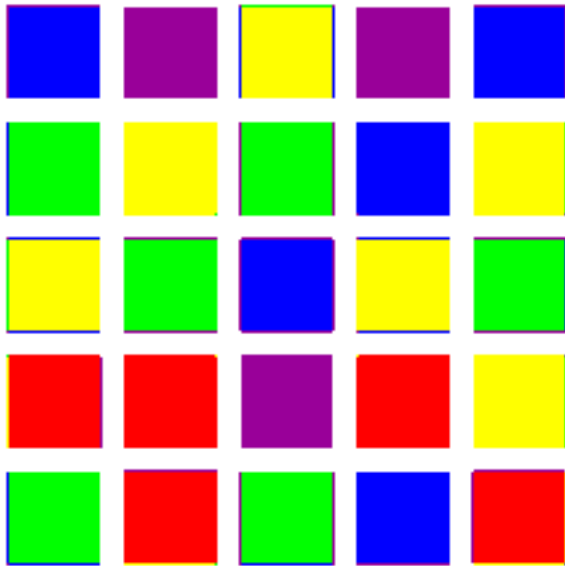
GAME B3



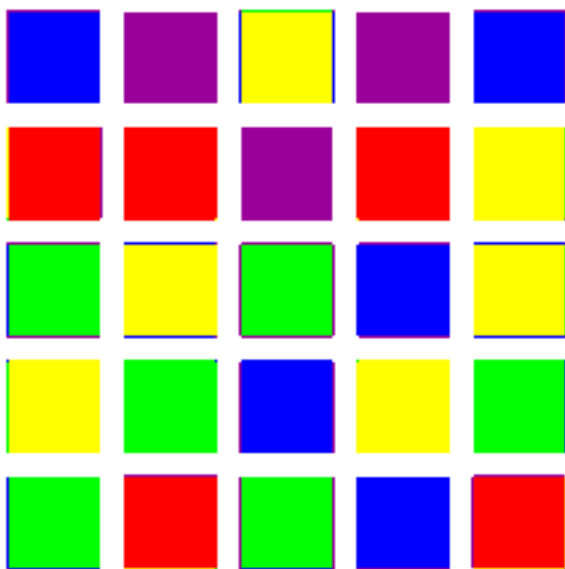
GAME B4



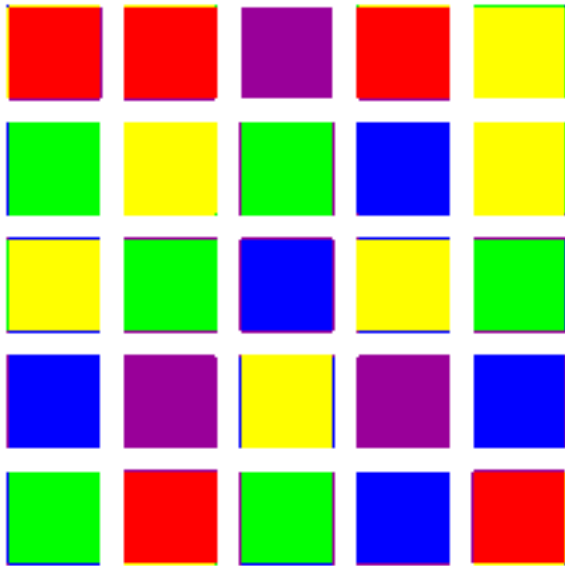
GAME B5



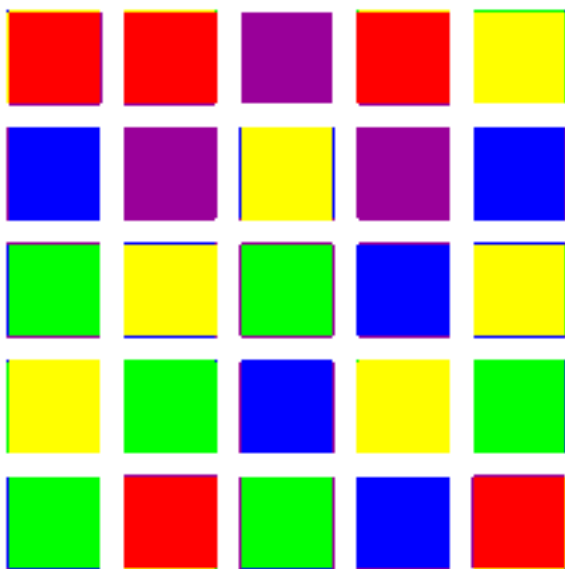
GAME B6



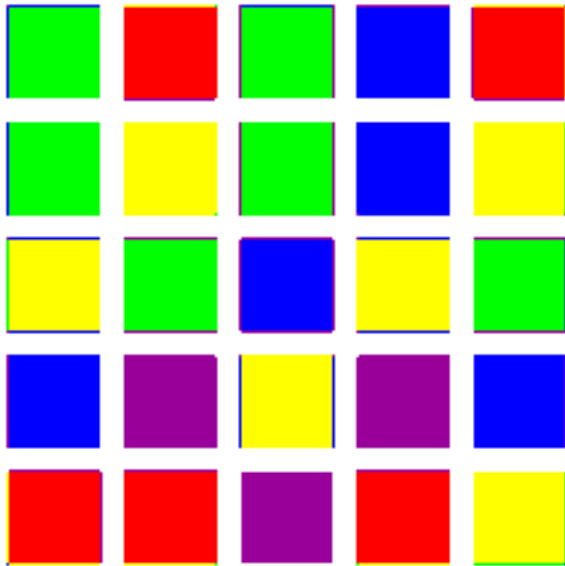
GAME B7



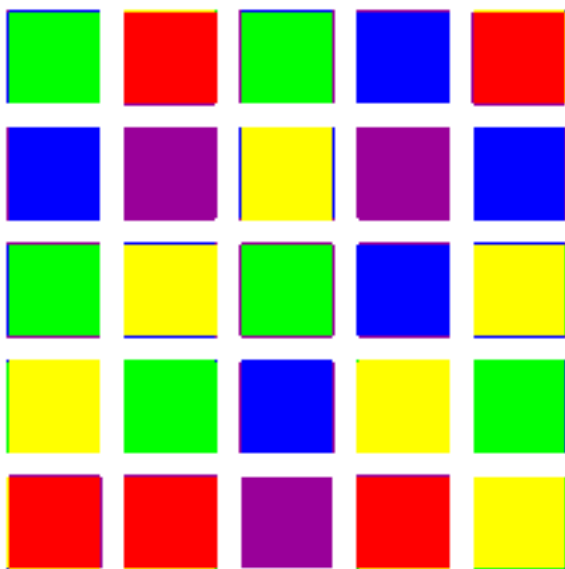
GAME B8



GAME B9



GAME B10

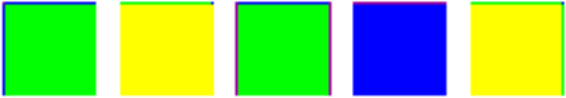



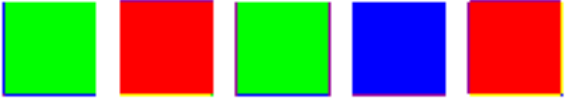


SOLUTIONS (LEVEL: researcher beginner)

GAME B1	GAME B2	GAME B3	GAME B4	GAME B5
GAME B6	GAME B7	GAME B8	GAME B9	GAME B10

ADDITIONAL GAMES AND SOLUTIONS

(LEVEL: researcher beginner)

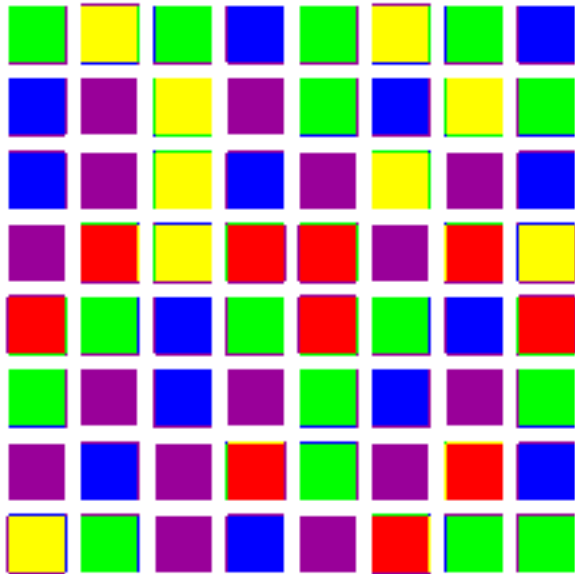
ROW 0	
ROW 1	
ROW 2	
ROW 3	
ROW 4	

GAME	PERMUTATION	GAME	PERMUTATION	GAME	PERMUTATION
E11	0, 1, 2, 4, 3	E51	1, 3, 4, 2, 0	E91	3, 1, 2, 4, 0
E12	0, 1, 3, 2, 4	E52	1, 4, 0, 2, 3	E92	3, 1, 4, 0, 2
E13	0, 1, 3, 4, 2	E53	1, 4, 0, 3, 2	E93	3, 1, 4, 2, 0
E14	0, 1, 4, 2, 3	E54	1, 4, 2, 0, 3	E94	3, 2, 0, 1, 4
E15	0, 1, 4, 3, 2	E55	1, 4, 2, 3, 0	E95	3, 2, 0, 4, 1
E16	0, 2, 1, 3, 4	E56	1, 4, 3, 0, 2	E96	3, 2, 1, 0, 4
E17	0, 2, 1, 4, 3	E57	1, 4, 3, 2, 0	E97	3, 2, 1, 4, 0
E18	0, 2, 3, 1, 4	E58	2, 0, 1, 3, 4	E98	3, 2, 4, 0, 1
E19	0, 2, 3, 4, 1	E59	2, 0, 1, 4, 3	E99	3, 2, 4, 1, 0
E20	0, 2, 4, 1, 3	E60	2, 0, 3, 1, 4	E100	3, 4, 0, 1, 2
E21	0, 2, 4, 3, 1	E61	2, 0, 3, 4, 1	E101	3, 4, 0, 2, 1
E22	0, 3, 1, 2, 4	E62	2, 0, 4, 1, 3	E102	3, 4, 1, 0, 2
E23	0, 3, 1, 4, 2	E63	2, 0, 4, 3, 1	E103	3, 4, 1, 2, 0
E24	0, 3, 2, 1, 4	E64	2, 1, 0, 3, 4	E104	3, 4, 2, 0, 1
E25	0, 3, 2, 4, 1	E65	2, 1, 0, 4, 3	E105	3, 4, 2, 1, 0
E26	0, 3, 4, 1, 2	E66	2, 1, 3, 0, 4	E106	4, 0, 1, 2, 3
E27	0, 3, 4, 2, 1	E67	2, 1, 3, 4, 0	E107	4, 0, 1, 3, 2
E28	0, 4, 1, 2, 3	E68	2, 1, 4, 0, 3	E108	4, 0, 2, 1, 3
E29	0, 4, 1, 3, 2	E69	2, 1, 4, 3, 0	E109	4, 0, 2, 3, 1
E30	0, 4, 2, 1, 3	E70	2, 3, 0, 1, 4	E110	4, 0, 3, 1, 2
E31	0, 4, 2, 3, 1	E71	2, 3, 0, 4, 1	E111	4, 0, 3, 2, 1
E32	0, 4, 3, 1, 2	E72	2, 3, 1, 0, 4	E112	4, 1, 0, 2, 3
E33	0, 4, 3, 2, 1	E73	2, 3, 1, 4, 0	E113	4, 1, 0, 3, 2
E34	1, 0, 2, 3, 4	E74	2, 3, 4, 0, 1	E114	4, 1, 2, 0, 3
E35	1, 0, 2, 4, 3	E75	2, 3, 4, 1, 0	E115	4, 1, 2, 3, 0
E36	1, 0, 3, 2, 4	E76	2, 4, 0, 1, 3	E116	4, 1, 3, 0, 2
E37	1, 0, 3, 4, 2	E77	2, 4, 0, 3, 1	E117	4, 1, 3, 2, 0
E38	1, 0, 4, 2, 3	E78	2, 4, 1, 0, 3	E118	4, 2, 0, 1, 3
E39	1, 0, 4, 3, 2	E79	2, 4, 1, 3, 0	E119	4, 2, 0, 3, 1
E40	1, 2, 0, 3, 4	E80	2, 4, 3, 0, 1	E120	4, 2, 1, 0, 3
E41	1, 2, 0, 4, 3	E81	2, 4, 3, 1, 0	E121	4, 2, 1, 3, 0
E42	1, 2, 3, 0, 4	E82	3, 0, 1, 2, 4	E122	4, 2, 3, 0, 1
E43	1, 2, 3, 4, 0	E83	3, 0, 1, 4, 2	E123	4, 2, 3, 1, 0
E44	1, 2, 4, 0, 3	E84	3, 0, 2, 1, 4	E124	4, 3, 0, 1, 2
E45	1, 2, 4, 3, 0	E85	3, 0, 2, 4, 1	E125	4, 3, 0, 2, 1
E46	1, 3, 0, 2, 4	E86	3, 0, 4, 1, 2	E126	4, 3, 1, 0, 2
E47	1, 3, 0, 4, 2	E87	3, 0, 4, 2, 1	E127	4, 3, 1, 2, 0
E48	1, 3, 2, 0, 4	E88	3, 1, 0, 2, 4	E128	4, 3, 2, 0, 1
E49	1, 3, 2, 4, 0	E89	3, 1, 0, 4, 2	E129	4, 3, 2, 1, 0
E50	1, 3, 4, 0, 2	E90	3, 1, 2, 0, 4		

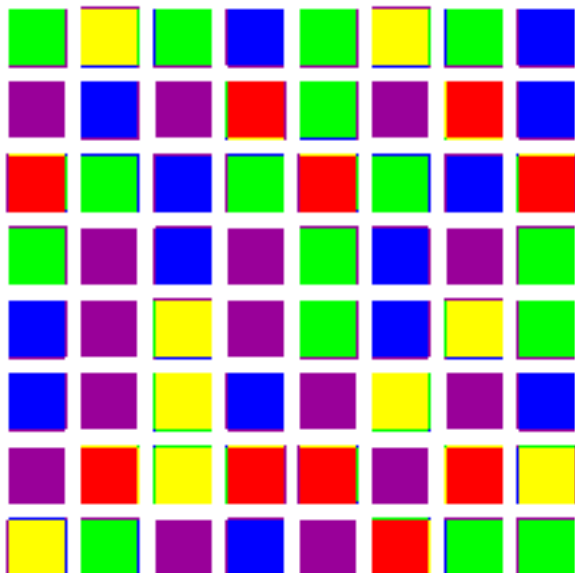
GAME	SOLUTION	GAME	SOLUTION	GAME	SOLUTION
E11	32	E51	35	E91	34
E12	34	E52	33	E92	34
E13	34	E53	33	E93	34
E14	32	E54	33	E94	34
E15	32	E55	33	E95	34
E16	34	E56	33	E96	34
E17	32	E57	33	E97	34
E18	33	E58	34	E98	34
E19	33	E59	32	E99	34
E20	32	E60	33	E100	34
E21	31	E61	33	E101	35
E22	33	E62	32	E102	34
E23	33	E63	32	E103	34
E24	33	E64	34	E104	34
E25	33	E65	33	E105	35
E26	33	E66	35	E106	32
E27	34	E67	35	E107	32
E28	32	E68	33	E108	34
E29	32	E69	33	E109	32
E30	34	E70	34	E110	32
E31	32	E71	34	E111	32
E32	32	E72	34	E112	32
E33	32	E73	34	E113	32
E34	34	E74	34	E114	32
E35	32	E75	34	E115	33
E36	34	E76	32	E116	33
E37	34	E77	32	E117	33
E38	33	E78	32	E118	33
E39	33	E79	33	E119	32
E40	34	E80	32	E120	32
E41	33	E81	32	E121	34
E42	35	E82	34	E122	32
E43	35	E83	34	E123	32
E44	33	E84	35	E124	32
E45	33	E85	34	E125	33
E46	35	E86	34	E126	32
E47	35	E87	35	E127	32
E48	35	E88	34	E128	32
E49	35	E89	34	E129	32
E50	35	E90	34		

GAMES (LEVEL: researcher)

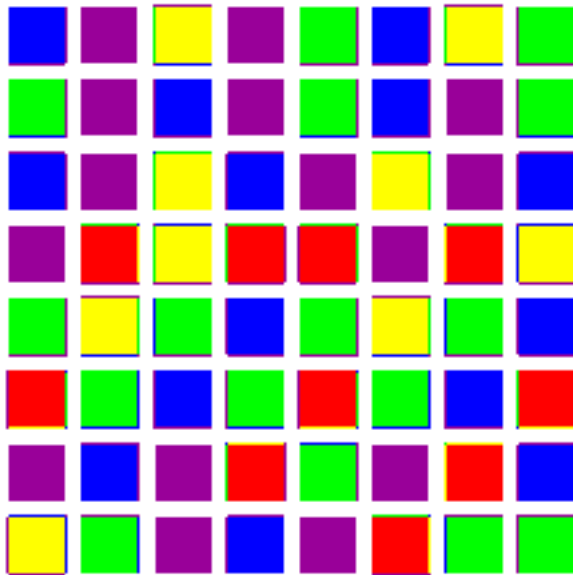
GAME R1



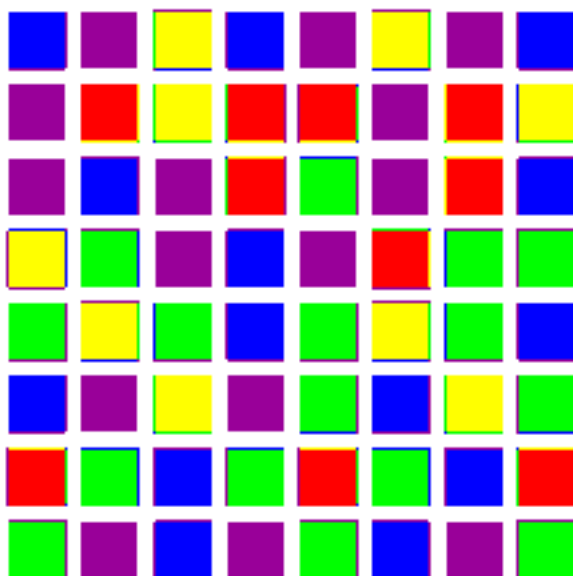
GAME R2



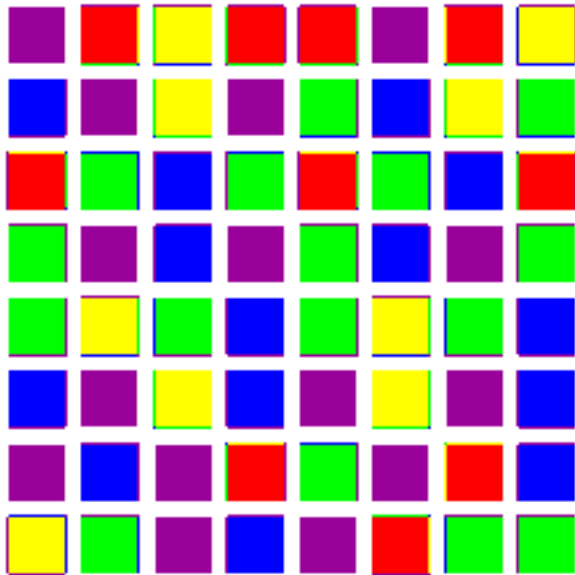
GAME R3



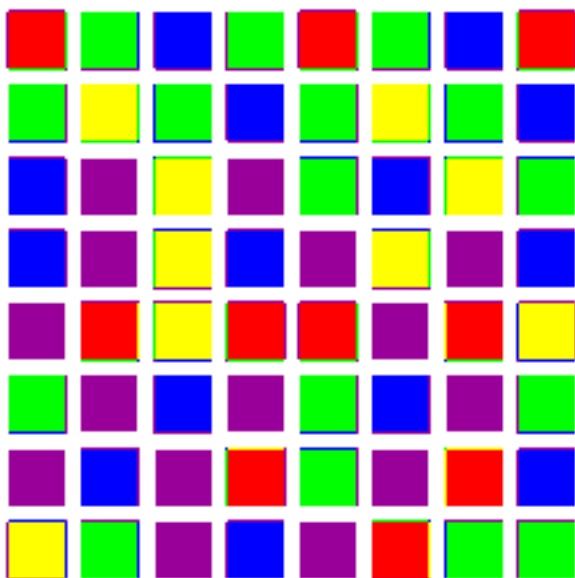
GAME R4



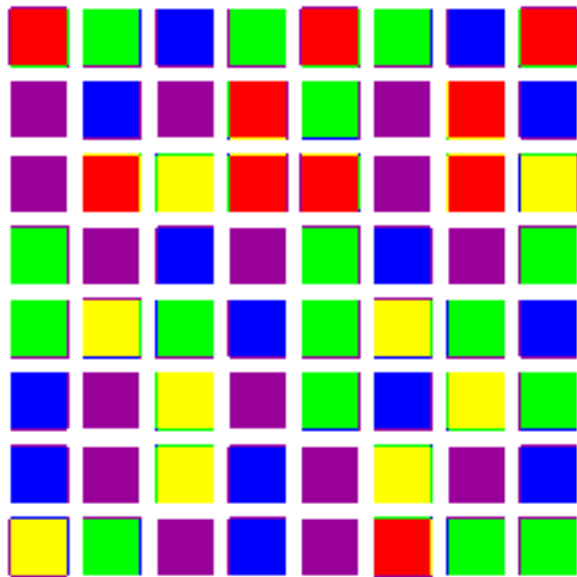
GAME R5



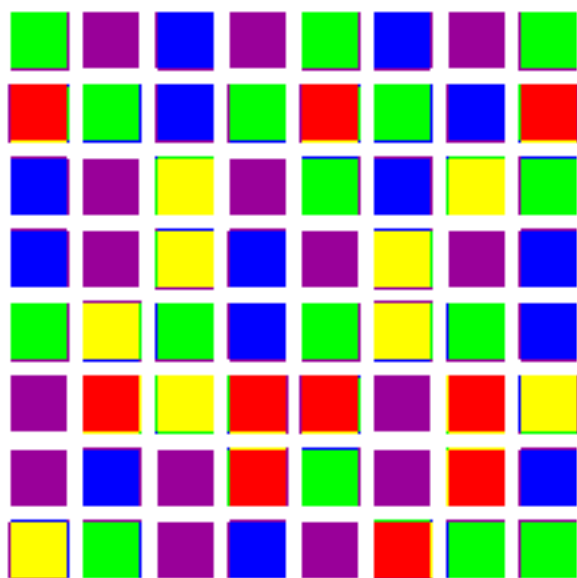
GAME R6



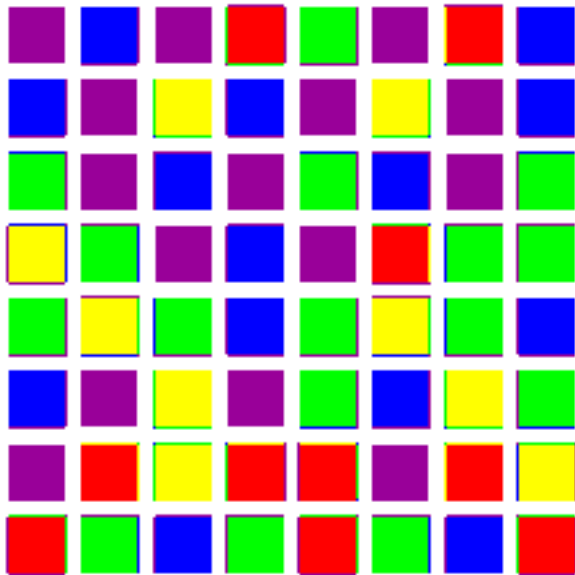
GAME R7



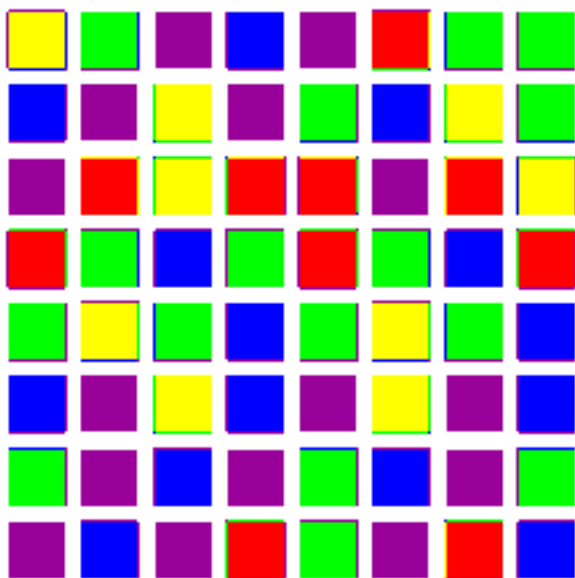
GAME R8



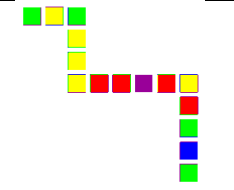
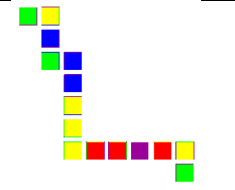
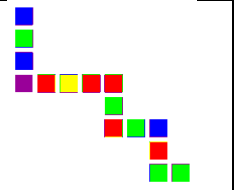

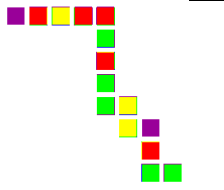
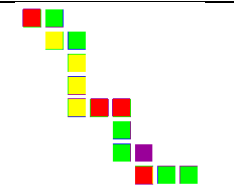
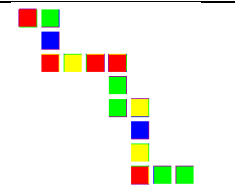
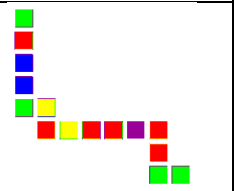
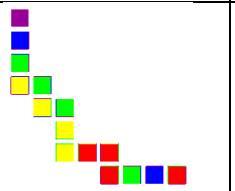
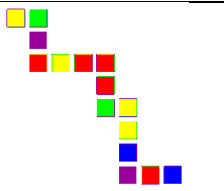
GAME R9



GAME R10











SOLUTIONS (LEVEL: researcher)

GAME R1	GAME R2	GAME R3	GAME R4	GAME R5
				
55	51	51	54	54
GAME R6	GAME R7	GAME R8	GAME R9	GAME R10
				
55	56	55	53	53

ADDITIONAL GAMES AND SOLUTIONS

(LEVEL: researcher)

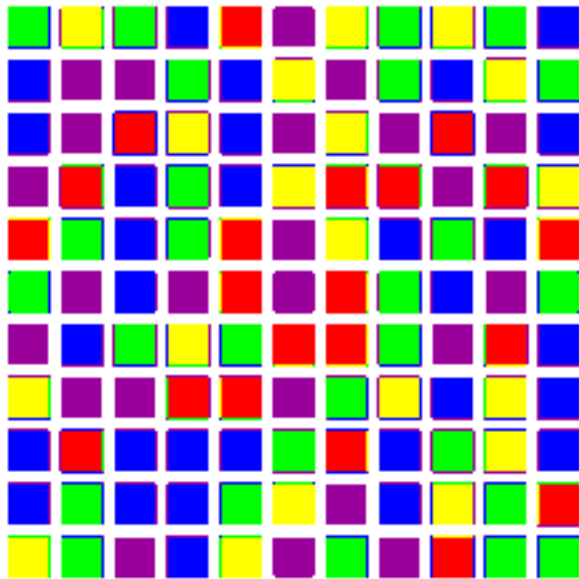
ROW 0	
ROW 1	
ROW 2	
ROW 3	
ROW 4	
ROW 5	
ROW 6	
ROW 7	

GAME	PERMUTATION	GAME	PERMUTATION	GAME	PERMUTATION
R11	0, 1, 2, 3, 4, 5, 7, 6	R45	2, 6, 0, 1, 7, 5, 4, 3	R79	5, 3, 0, 2, 7, 4, 6, 1
R12	0, 1, 5, 3, 7, 4, 2, 6	R46	2, 6, 4, 3, 7, 0, 1, 5	R80	5, 3, 4, 6, 2, 7, 0, 1
R13	0, 2, 1, 6, 5, 4, 7, 3	R47	2, 7, 0, 6, 4, 1, 5, 3	R81	5, 4, 1, 0, 3, 7, 6, 2
R14	0, 2, 6, 1, 4, 7, 3, 5	R48	2, 7, 5, 1, 3, 4, 0, 6	R82	5, 4, 6, 2, 1, 0, 3, 7
R15	0, 3, 2, 5, 1, 7, 6, 4	R49	3, 0, 2, 6, 1, 5, 7, 4	R83	5, 6, 1, 7, 0, 2, 4, 3
R16	0, 3, 6, 7, 1, 2, 4, 5	R50	3, 0, 6, 7, 5, 4, 1, 2	R84	5, 6, 7, 0, 4, 2, 1, 3
R17	0, 4, 3, 1, 7, 2, 6, 5	R51	3, 1, 4, 2, 6, 7, 5, 0	R85	5, 7, 2, 3, 4, 1, 6, 0
R18	0, 4, 7, 3, 5, 2, 1, 6	R52	3, 1, 7, 5, 4, 0, 2, 6	R86	5, 7, 6, 4, 1, 3, 0, 2
R19	0, 5, 3, 7, 2, 4, 6, 1	R53	3, 2, 5, 0, 4, 1, 7, 6	R87	6, 0, 4, 2, 1, 7, 5, 3
R20	0, 6, 1, 3, 2, 7, 4, 5	R54	3, 4, 0, 5, 1, 6, 2, 7	R88	6, 1, 0, 5, 2, 3, 4, 7
R21	0, 6, 4, 3, 7, 5, 2, 1	R55	3, 4, 5, 6, 7, 1, 2, 0	R89	6, 1, 4, 7, 5, 0, 3, 2
R22	0, 7, 1, 6, 5, 2, 3, 4	R56	3, 5, 1, 0, 6, 7, 2, 4	R90	6, 2, 1, 3, 5, 4, 0, 7
R23	0, 7, 5, 2, 4, 1, 6, 3	R57	3, 5, 6, 2, 1, 7, 4, 0	R91	6, 2, 5, 4, 1, 3, 7, 0
R24	1, 0, 3, 6, 4, 5, 2, 7	R58	3, 6, 1, 7, 2, 0, 4, 5	R92	6, 3, 2, 0, 1, 7, 4, 5
R25	1, 0, 7, 2, 3, 5, 6, 4	R59	3, 6, 7, 1, 0, 2, 5, 4	R93	6, 3, 7, 1, 5, 4, 2, 0
R26	1, 2, 4, 3, 7, 6, 0, 5	R60	3, 7, 2, 4, 6, 1, 0, 5	R94	6, 4, 2, 5, 7, 0, 1, 3
R27	1, 2, 7, 5, 4, 6, 3, 0	R61	3, 7, 6, 5, 2, 1, 4, 0	R95	6, 5, 0, 1, 4, 2, 7, 3
R28	1, 3, 5, 0, 6, 2, 4, 7	R62	4, 0, 5, 2, 3, 7, 1, 6	R96	6, 5, 3, 2, 1, 4, 0, 7
R29	1, 4, 0, 5, 3, 2, 7, 6	R63	4, 1, 0, 6, 2, 7, 5, 3	R97	6, 7, 0, 5, 1, 3, 4, 2
R30	1, 4, 5, 7, 0, 3, 2, 6	R64	4, 1, 6, 0, 2, 3, 5, 7	R98	6, 7, 4, 0, 5, 3, 1, 2
R31	1, 5, 2, 0, 7, 4, 6, 3	R65	4, 2, 1, 3, 7, 0, 6, 5	R99	7, 0, 2, 4, 5, 6, 3, 1
R32	1, 5, 6, 3, 4, 7, 0, 2	R66	4, 2, 6, 5, 3, 1, 0, 7	R100	7, 0, 5, 6, 3, 1, 2, 4
R33	1, 6, 2, 7, 3, 5, 4, 0	R67	4, 3, 2, 0, 5, 6, 7, 1	R101	7, 1, 3, 2, 4, 0, 6, 5
R34	1, 6, 7, 2, 3, 0, 4, 5	R68	4, 3, 7, 2, 0, 6, 1, 5	R102	7, 1, 6, 4, 0, 3, 2, 5
R35	1, 7, 3, 5, 0, 2, 6, 4	R69	4, 5, 2, 6, 7, 3, 1, 0	R103	7, 2, 3, 6, 5, 1, 4, 0
R36	1, 7, 6, 5, 4, 2, 0, 3	R70	4, 6, 0, 1, 7, 2, 3, 5	R104	7, 3, 0, 2, 5, 6, 1, 4
R37	2, 0, 5, 3, 6, 4, 7, 1	R71	4, 6, 3, 2, 5, 0, 7, 1	R105	7, 3, 4, 5, 1, 6, 2, 0
R38	2, 1, 0, 6, 4, 7, 3, 5	R72	4, 7, 0, 6, 2, 3, 1, 5	R106	7, 4, 1, 0, 3, 2, 5, 6
R39	2, 1, 6, 0, 3, 7, 5, 4	R73	4, 7, 5, 1, 0, 3, 6, 2	R107	7, 4, 5, 2, 0, 1, 6, 3
R40	2, 3, 1, 5, 0, 4, 6, 7	R74	5, 0, 2, 4, 7, 6, 1, 3	R108	7, 5, 1, 4, 6, 2, 0, 3
R41	2, 3, 6, 5, 7, 0, 4, 1	R75	5, 0, 6, 7, 3, 4, 2, 1	R109	7, 5, 6, 0, 3, 2, 4, 1
R42	2, 4, 3, 0, 6, 5, 1, 7	R76	5, 1, 3, 2, 6, 0, 4, 7	R110	7, 6, 2, 3, 1, 5, 0, 4
R43	2, 4, 7, 3, 1, 5, 6, 0	R77	5, 1, 7, 4, 2, 0, 6, 3	R111	7, 6, 5, 4, 0, 3, 2, 1
R44	2, 5, 3, 7, 0, 6, 1, 4	R78	5, 2, 4, 0, 1, 6, 3, 7		

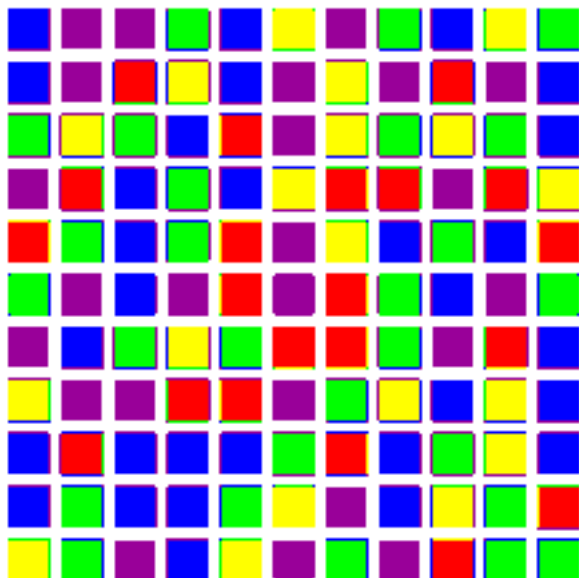
GAME	SOLUTION	GAME	SOLUTION	GAME	SOLUTION
R11	57	R45	52	R79	56
R12	52	R46	53	R80	55
R13	55	R47	52	R81	54
R14	55	R48	53	R82	52
R15	55	R49	55	R83	52
R16	57	R50	54	R84	53
R17	55	R51	52	R85	54
R18	56	R52	51	R86	50
R19	54	R53	52	R87	50
R20	53	R54	53	R88	52
R21	52	R55	52	R89	53
R22	52	R56	54	R90	52
R23	53	R57	51	R91	49
R24	56	R58	54	R92	52
R25	53	R59	53	R93	50
R26	53	R60	52	R94	53
R27	52	R61	51	R95	52
R28	52	R62	55	R96	51
R29	54	R63	51	R97	52
R30	54	R64	52	R98	52
R31	53	R65	55	R99	52
R32	51	R66	53	R100	53
R33	51	R67	55	R101	53
R34	51	R68	59	R102	53
R35	55	R69	52	R103	53
R36	53	R70	53	R104	57
R37	55	R71	55	R105	54
R38	52	R72	54	R106	54
R39	52	R73	55	R107	56
R40	52	R74	56	R108	53
R41	52	R75	55	R109	54
R42	55	R76	52	R110	53
R43	54	R77	55	R111	54
R44	55	R78	54		

GAMES (LEVEL: experienced researcher)

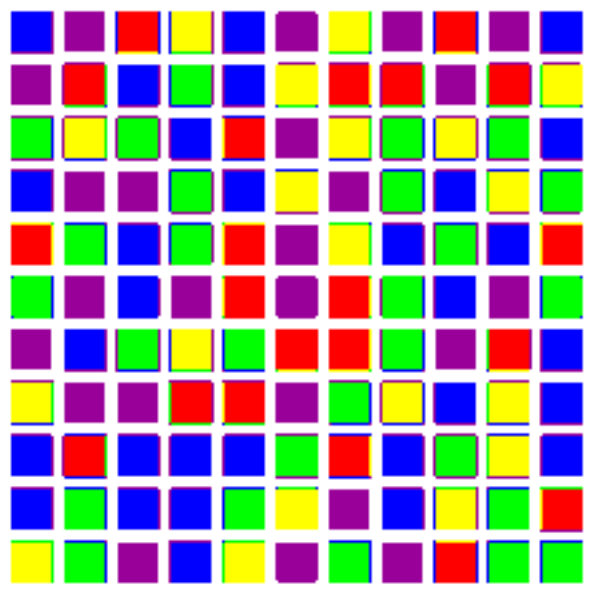
GAME E1



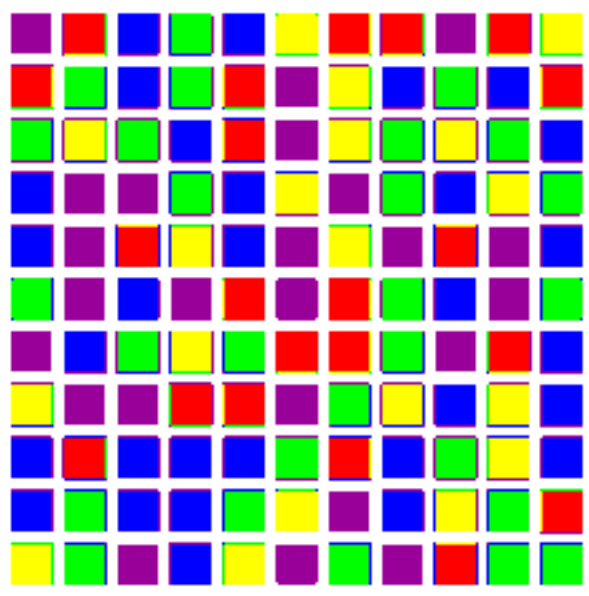
GAME E2



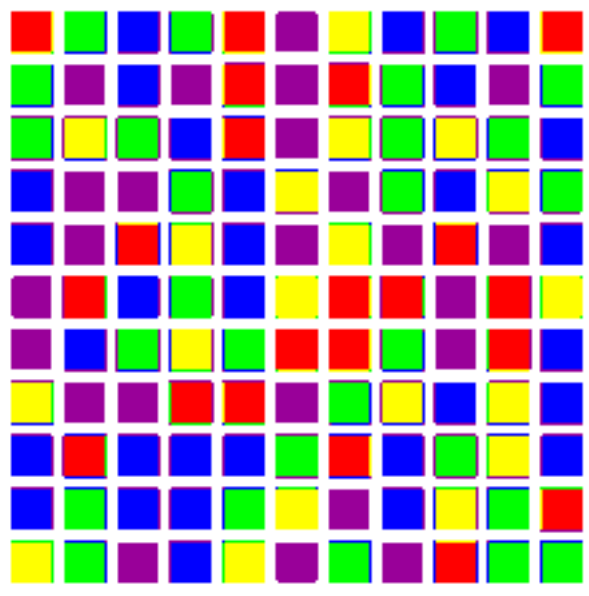
GAME E3



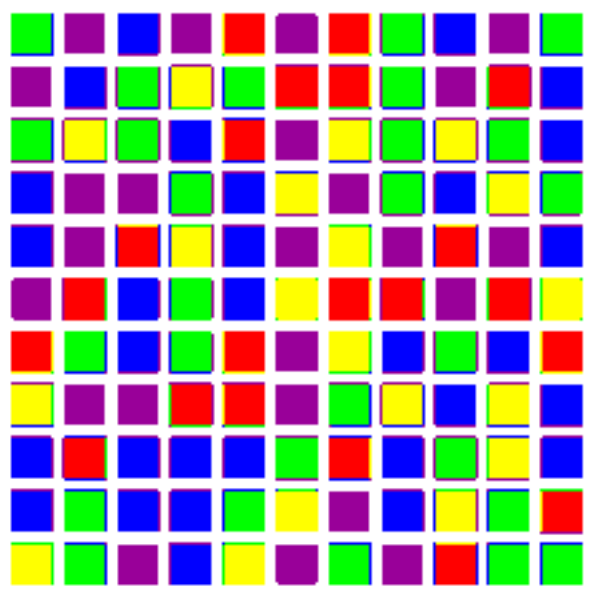
GAME E4



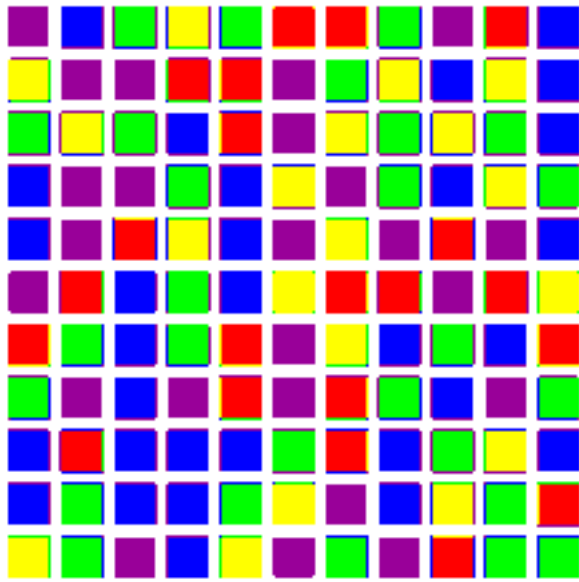
GAME E5



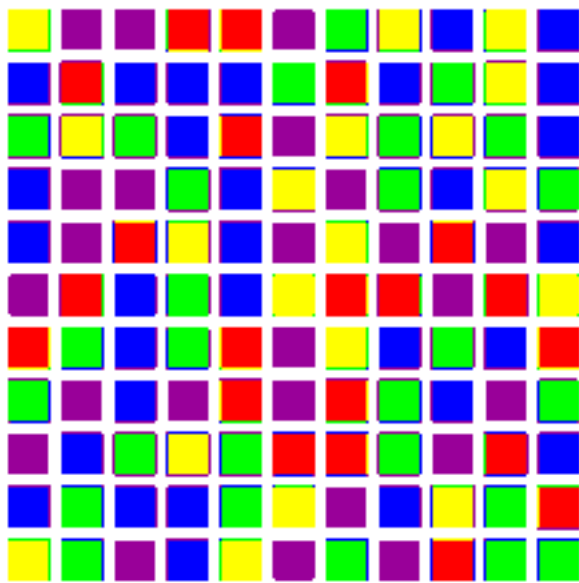
GAME E6



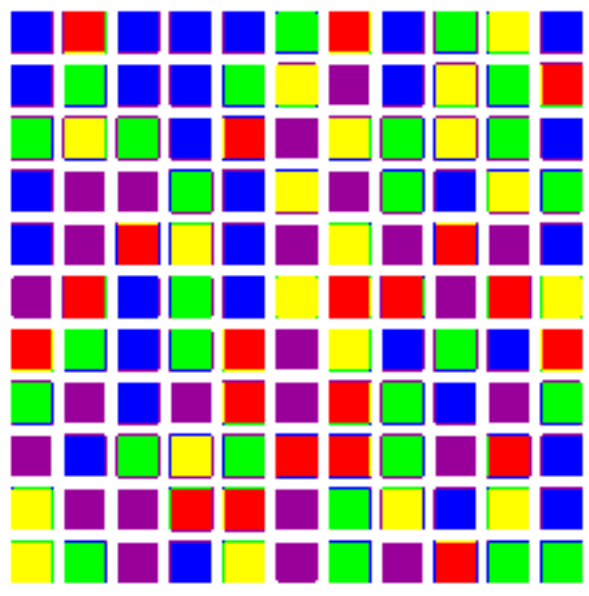
GAME E7



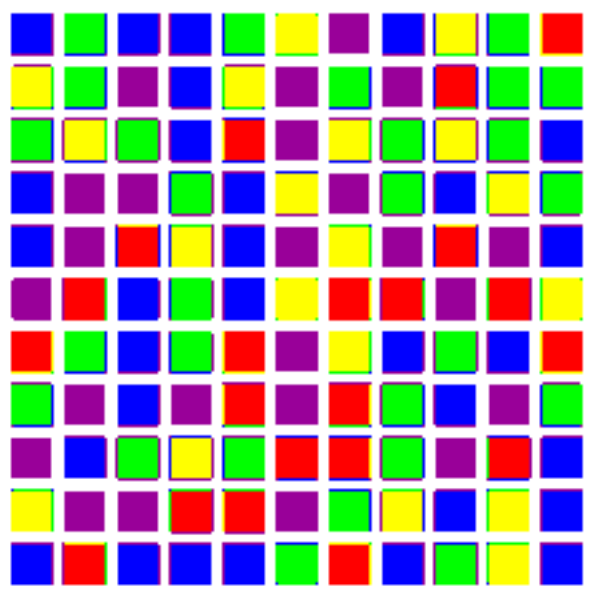
GAME E8



GAME E9



GAME E10



SOLUTIONS (LEVEL: experienced researcher)

GAME E1	GAME E2	GAME E3	GAME E4	GAME E5
77	75	75	74	79
GAME E6	GAME E7	GAME E8	GAME E9	GAME E10
72	75	77	76	74

ADDITIONA GAMES AND SOLUTIONS

(LEVEL: experienced researcher)

ROW 0	
ROW 1	
ROW 2	
ROW 3	
ROW 4	
ROW 5	
ROW 6	
ROW 7	
ROW 8	
ROW 9	
ROW 10	

GAME	PERMUTATION	GAME	PERMUTATION	GAME	PERMUTATION
E11	0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 9	E45	3, 8, 4, 6, 9, 5, 7, 0, 1, 10, 2	E79	7, 4, 9, 1, 6, 2, 3, 0, 5, 10, 8
E12	0, 2, 1, 10, 4, 6, 7, 3, 5, 9, 8	E46	3, 9, 5, 6, 0, 1, 2, 4, 7, 10, 8	E80	7, 5, 10, 0, 8, 4, 6, 1, 2, 9, 3
E13	0, 3, 2, 9, 5, 8, 10, 1, 4, 7, 6	E47	3, 10, 6, 4, 1, 5, 7, 0, 2, 9, 8	E81	7, 8, 0, 1, 2, 3, 4, 5, 6, 10, 9
E14	0, 4, 3, 8, 7, 2, 5, 1, 6, 10, 9	E48	4, 0, 8, 3, 5, 9, 10, 1, 2, 7, 6	E82	7, 9, 0, 10, 2, 4, 5, 1, 3, 8, 6
E15	0, 5, 4, 7, 9, 6, 8, 1, 2, 10, 3	E49	4, 1, 9, 2, 7, 3, 5, 0, 6, 10, 8	E83	7, 10, 1, 8, 3, 6, 9, 0, 2, 5, 4
E16	0, 6, 5, 7, 1, 2, 3, 4, 8, 10, 9	E50	4, 2, 10, 0, 8, 6, 7, 1, 3, 9, 5	E84	8, 0, 3, 7, 6, 2, 4, 1, 5, 10, 9
E17	0, 7, 6, 4, 2, 5, 8, 1, 3, 10, 9	E51	4, 5, 0, 1, 2, 3, 6, 7, 8, 10, 9	E85	8, 1, 4, 6, 9, 5, 7, 0, 2, 10, 3
E18	0, 8, 7, 3, 4, 9, 10, 1, 2, 6, 5	E52	4, 6, 0, 10, 2, 5, 7, 1, 3, 9, 8	E86	8, 2, 5, 6, 0, 1, 3, 4, 7, 10, 9
E19	0, 9, 8, 2, 6, 3, 4, 1, 5, 10, 7	E53	4, 7, 1, 9, 3, 8, 10, 0, 2, 6, 5	E87	8, 3, 6, 4, 1, 5, 7, 0, 2, 10, 9
E20	0, 10, 9, 1, 7, 5, 6, 2, 3, 8, 4	E54	4, 8, 2, 7, 6, 1, 3, 0, 5, 10, 9	E88	8, 4, 7, 2, 3, 9, 10, 0, 1, 6, 5
E21	1, 2, 0, 3, 4, 5, 6, 7, 8, 10, 9	E55	4, 9, 3, 6, 8, 5, 7, 0, 1, 10, 2	E89	8, 5, 9, 1, 6, 2, 3, 0, 4, 10, 7
E22	1, 3, 0, 10, 4, 6, 7, 2, 5, 9, 8	E56	4, 10, 5, 6, 0, 1, 2, 3, 7, 9, 8	E90	8, 6, 10, 0, 7, 4, 5, 1, 2, 9, 3
E23	1, 4, 2, 9, 5, 8, 10, 0, 3, 7, 6	E57	5, 0, 7, 4, 2, 6, 8, 1, 3, 10, 9	E91	8, 9, 0, 1, 2, 3, 4, 5, 6, 10, 7
E24	1, 5, 3, 8, 7, 2, 4, 0, 6, 10, 9	E58	5, 1, 8, 3, 4, 9, 10, 0, 2, 7, 6	E92	8, 10, 0, 9, 2, 4, 5, 1, 3, 7, 6
E25	1, 6, 4, 7, 9, 5, 8, 0, 2, 10, 3	E59	5, 2, 9, 1, 7, 3, 4, 0, 6, 10, 8	E93	9, 0, 2, 8, 4, 7, 10, 1, 3, 6, 5
E26	1, 7, 5, 6, 0, 2, 3, 4, 8, 10, 9	E60	5, 3, 10, 0, 8, 6, 7, 1, 2, 9, 4	E94	9, 1, 3, 7, 6, 2, 4, 0, 5, 10, 8
E27	1, 8, 6, 4, 2, 5, 7, 0, 3, 10, 9	E61	5, 6, 0, 1, 2, 3, 4, 7, 8, 10, 9	E95	9, 2, 4, 6, 8, 5, 7, 0, 1, 10, 3
E28	1, 9, 7, 3, 4, 8, 10, 0, 2, 6, 5	E62	5, 7, 0, 10, 2, 4, 6, 1, 3, 9, 8	E96	9, 3, 5, 6, 0, 1, 2, 4, 7, 10, 8
E29	1, 10, 8, 2, 6, 3, 4, 0, 5, 9, 7	E63	5, 8, 1, 9, 3, 7, 10, 0, 2, 6, 4	E97	9, 4, 6, 3, 1, 5, 7, 0, 2, 10, 8
E30	2, 0, 10, 1, 8, 6, 7, 3, 4, 9, 5	E64	5, 9, 2, 7, 6, 1, 3, 0, 4, 10, 8	E98	9, 5, 7, 2, 3, 8, 10, 0, 1, 6, 4
E31	2, 3, 0, 1, 4, 5, 6, 7, 8, 10, 9	E65	5, 10, 3, 6, 8, 4, 7, 0, 1, 9, 2	E99	9, 6, 8, 1, 5, 2, 3, 0, 4, 10, 7
E32	2, 4, 0, 10, 3, 6, 7, 1, 5, 9, 8	E66	6, 0, 5, 7, 1, 2, 3, 4, 8, 10, 9	E100	9, 7, 10, 0, 6, 4, 5, 1, 2, 8, 3
E33	2, 5, 1, 9, 4, 8, 10, 0, 3, 7, 6	E67	6, 1, 7, 4, 2, 5, 8, 0, 3, 10, 9	E101	9, 10, 0, 1, 2, 3, 4, 5, 6, 8, 7
E34	2, 6, 3, 8, 7, 1, 4, 0, 5, 10, 9	E68	6, 2, 8, 3, 4, 9, 10, 0, 1, 7, 5	E102	10, 0, 1, 9, 3, 5, 6, 2, 4, 8, 7
E35	2, 7, 4, 6, 9, 5, 8, 0, 1, 10, 3	E69	6, 3, 9, 1, 7, 2, 4, 0, 5, 10, 8	E103	10, 1, 2, 8, 4, 7, 9, 0, 3, 6, 5
E36	2, 8, 5, 6, 0, 1, 3, 4, 7, 10, 9	E70	6, 4, 10, 0, 8, 5, 7, 1, 2, 9, 3	E104	10, 2, 3, 7, 6, 1, 4, 0, 5, 9, 8
E37	2, 9, 6, 4, 1, 5, 7, 0, 3, 10, 8	E71	6, 7, 0, 1, 2, 3, 4, 5, 8, 10, 9	E105	10, 3, 4, 6, 8, 5, 7, 0, 1, 9, 2
E38	2, 10, 7, 3, 4, 8, 9, 0, 1, 6, 5	E72	6, 8, 0, 10, 2, 4, 5, 1, 3, 9, 7	E106	10, 4, 5, 6, 0, 1, 2, 3, 7, 9, 8
E39	3, 0, 9, 2, 7, 4, 5, 1, 6, 10, 8	E73	6, 9, 1, 8, 3, 7, 10, 0, 2, 5, 4	E107	10, 5, 6, 3, 1, 4, 7, 0, 2, 9, 8
E40	3, 1, 10, 0, 8, 6, 7, 2, 4, 9, 5	E74	6, 10, 2, 7, 5, 1, 3, 0, 4, 9, 8	E108	10, 6, 7, 2, 3, 8, 9, 0, 1, 5, 4
E41	3, 4, 0, 1, 2, 5, 6, 7, 8, 10, 9	E75	7, 0, 4, 6, 9, 5, 8, 1, 2, 10, 3	E109	10, 7, 8, 1, 5, 2, 3, 0, 4, 9, 6
E42	3, 5, 0, 10, 2, 6, 7, 1, 4, 9, 8	E76	7, 1, 5, 6, 0, 2, 3, 4, 8, 10, 9	E110	10, 8, 9, 0, 6, 4, 5, 1, 2, 7, 3
E43	3, 6, 1, 9, 4, 8, 10, 0, 2, 7, 5	E77	7, 2, 6, 4, 1, 5, 8, 0, 3, 10, 9		
E44	3, 7, 2, 8, 6, 1, 4, 0, 5, 10, 9	E78	7, 3, 8, 2, 4, 9, 10, 0, 1, 6, 5		

GAME	SOLUTION	GAME	SOLUTION	GAME	SOLUTION
E11	79	E45	72	E79	80
E12	79	E46	71	E80	79
E13	75	E47	74	E81	78
E14	79	E48	77	E82	77
E15	83	E49	77	E83	75
E16	79	E50	80	E84	80
E17	83	E51	79	E85	77
E18	75	E52	80	E86	80
E19	79	E53	77	E87	80
E20	80	E54	86	E88	75
E21	77	E55	78	E89	77
E22	75	E56	79	E90	78
E23	76	E57	81	E91	74
E24	76	E58	76	E92	78
E25	78	E59	74	E93	76
E26	80	E60	77	E94	75
E27	79	E61	74	E95	80
E28	72	E62	78	E96	73
E29	79	E63	74	E97	79
E30	78	E64	79	E98	73
E31	77	E65	77	E99	76
E32	77	E66	76	E100	80
E33	73	E67	79	E101	75
E34	78	E68	76	E102	78
E35	81	E69	72	E103	73
E36	76	E70	77	E104	76
E37	74	E71	77	E105	79
E38	74	E72	76	E106	79
E39	79	E73	76	E107	77
E40	74	E74	77	E108	77
E41	76	E75	79	E109	74
E42	77	E76	80	E110	79
E43	71	E77	80		
E44	75	E78	76		