



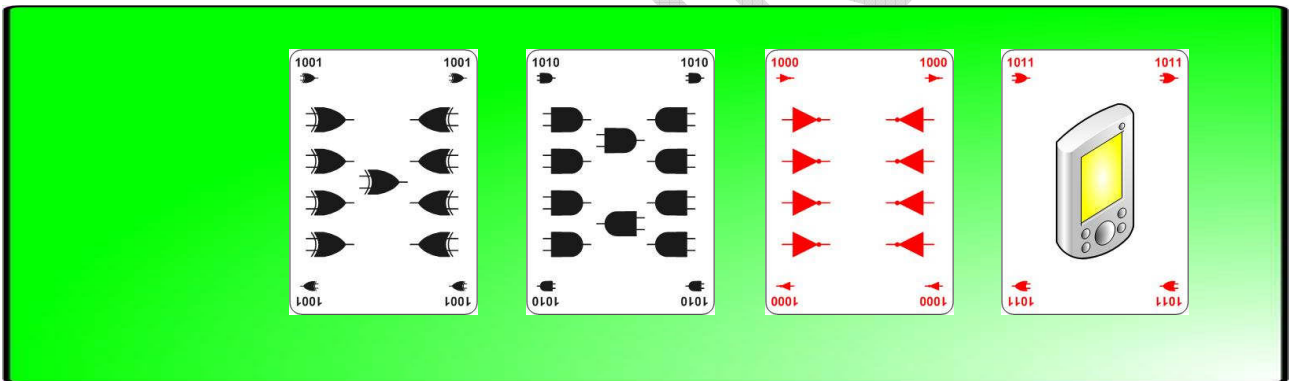
LET'S PLAY A SOLBIT GAME

Let's check together a SOLBIT game trying to point out all the game phases.

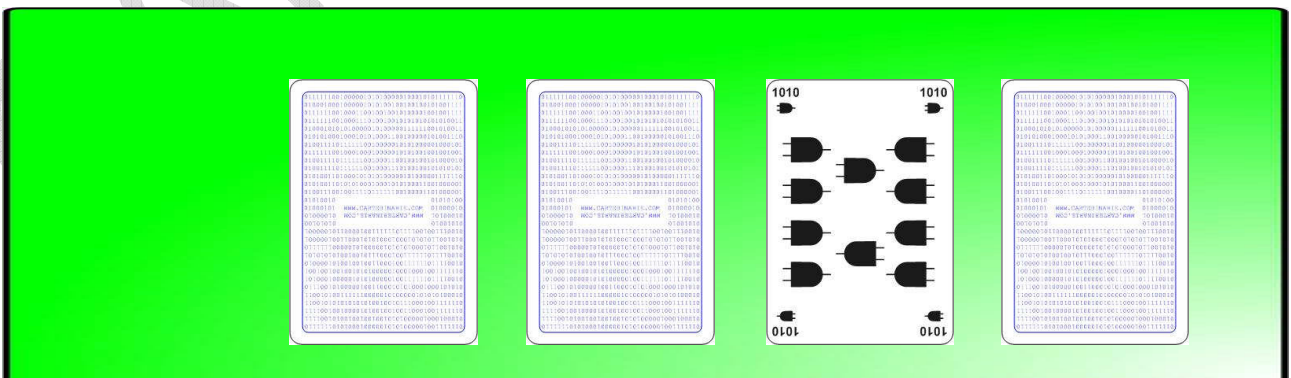
Choice of the key-card

After having shuffled the deck, turn the cards one by one starting from the top of deck and choose 4 cards, one of each suit.

First card	1001	XOR	Possible key-card
Second card	0011	XOR	This suit has already been chosen, the card is to be put under the deck
Third card	1010	AND	Possible key-card
Fourth card	1010	XOR	This suit has already been chosen, the card is to be put under the deck
Fifth card	1000	NOT	Possible key-card
Sixth card	0010	AND	This suit has already been chosen, the card is to be put under the deck
Seventh card	0010	XOR	This suit has already been chosen, the card is to be put under the deck
Eighth card	1011	OR	Possible key-card



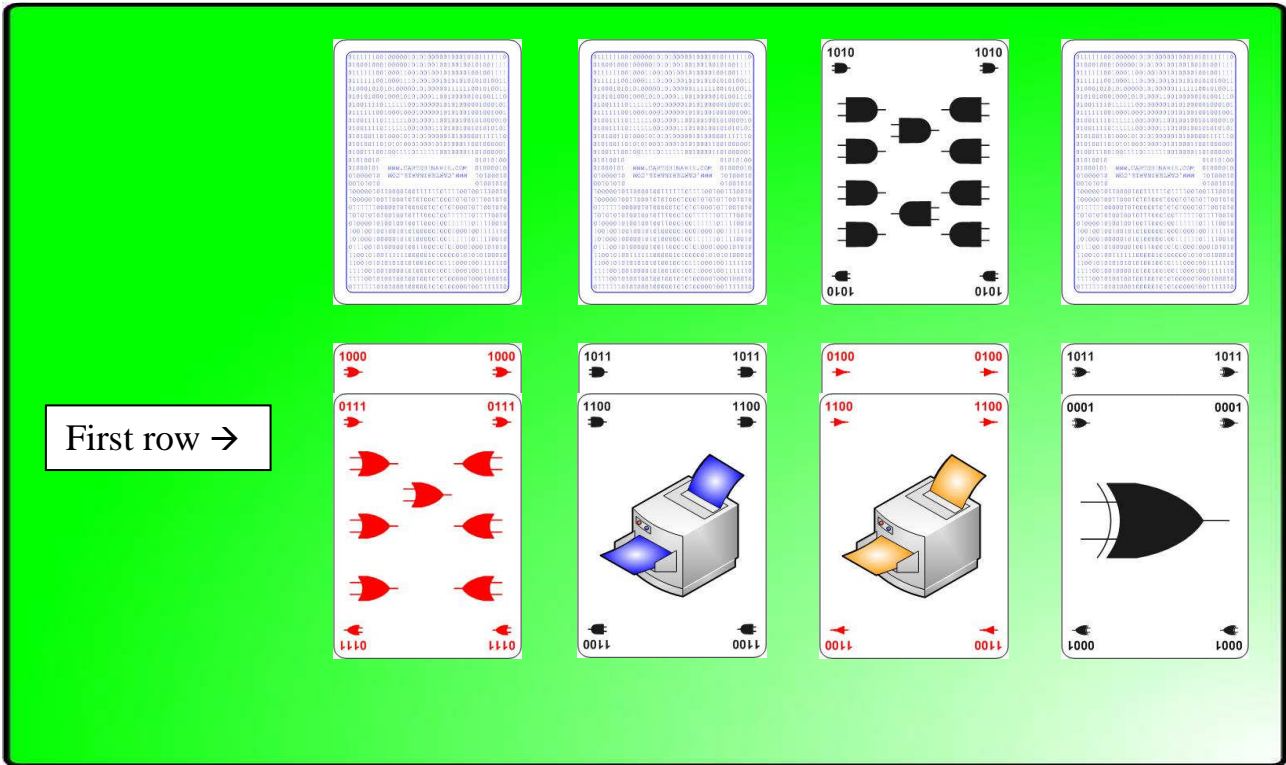
Shuffle the four cards and place them on the table with the back up, choose one and turn it, this the key-card (i.e. 1010 AND).





Starting

Set the first row, the sequence of the suits is: OR, AND, NOT, XOR. See the 55th card.

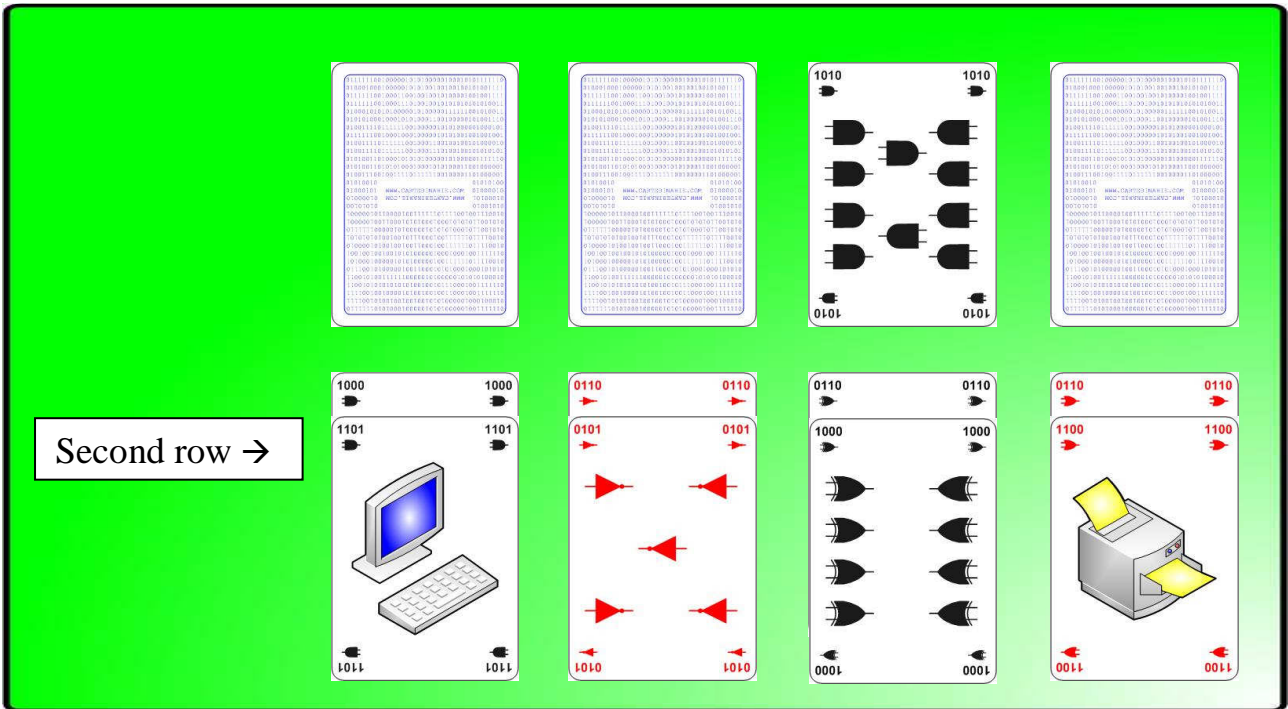


Sequence of game	Card	Operation	Remarks
1	0100 NOT	OK	
2	1101 AND	Discarded	The card could be placed, but it is more useful to complete the second row
3	0111 NOT	Discarded	
4	0010 NOT	Discarded	
5	1011 XOR	OK	The 4th bit of the next XOR card is to be 1
6	1100 NOT	OK	
7	1101 NOT	Discarded	
8	1000 OR	OK	
9	1011 NOT	Discarded	
10	1011 AND	OK	
11	1100 AND	OK	
12	1010 NOT	Discarded	
13	1001 AND	Discarded	
14	0001 XOR	OK	
15	0111 OR	OK	





The discarded cards are placed under the deck and go on making the second row, the sequence of suits is AND, NOT, XOR, OR.



Sequence of game	Card	Operation	Remarks
1	0011 OR	Discarded	
2	0110 OR	OK	
3	0101 OR	Discarded	
4	1001 NOT	Discarded	
5	0101 AND	Discarded	
6	0110 XOR	OK	The 3rd bit of the next XOR card is to be 0
7	0110 NOT	OK	
8	1100 OR	OK	
9	1001 OR	Discarded	
10	0001 OR	Discarded	
11	1000 XOR	OK	
12	0010 OR	Discarded	
13	0100 AND	Discarded	
14	0100 OR	Discarded	
15	0011 NOT	Discarded	
16	1101 OR	Discarded	
17	1101 XOR	Discarded	
18	0101 NOT	OK	
19	1000 AND	OK	
20	0101 XOR	Discarded	





21	1010 OR	Discarded	
22	0100 XOR	Discarded	
23	0001 NOT	Discarded	
24	0110 AND	Discarded	
25	0001 AND	Discarded	
26	1100 XOR	Discarded	
27	0111 XOR	Discarded	
28	0111 AND	Discarded	
29	0011 AND	Discarded	
30	0011 XOR	Discarded	
31	1010 XOR	Discarded	
32	0010 AND	Discarded	
33	0010 XOR	Discarded	
34	1101 AND	OK	

The discarded cards are placed under the deck and go on making the third row, the sequence of suits is NOT, XOR, OR, AND

The image shows a green rectangular area representing a deck of cards. The top row contains four cards with binary patterns and logic gates. The bottom row contains four cards with binary patterns and logic gates. A box on the left says "Third row ->" with an arrow pointing to the bottom row of cards.

Sequence of game	Card	Operation	Remarks
1	0111 NOT	OK	
2	0010 NOT	OK	
3	1100 NOT	Discarded	
4	1011 NOT	Discarded	
5	1010 NOT	Discarded	





6	1001 AND	Discarded	The card could be placed, but we discard it to use it on the sixth row: - the first bit on the left of the key-card is 1 - the first suit of the sixth row is AND - the result of the AND operation is 1 if both the operands are 1
7	0011 OR	OK	
8	0101 OR	OK	
9	1001 NOT	Discarded	
10	0101 AND	OK	
11	1001 OR	Discarded	
12	0001 OR	Discarded	
13	0010 OR	Discarded	
14	0100 AND	OK	
15	0100 OR	Discarded	
16	0011 NOT	Discarded	
17	1101 OR	Discarded	
18	1101 XOR	OK	
19	0101 XOR	OK	

The discarded cards are placed under the deck and go on making the fourth row, the sequence of suits is XOR, OR, AND, NOT

Fourth row →





Sequence of game	Card	Operation	Remarks
1	1010 OR	OK	
2	0100 XOR	OK	
3	0001 NOT	OK	
4	0110 AND	OK	
5	0001 AND	Discarded	
6	1100 XOR	OK	
7	0111 XOR	Discarded	
8	0111 AND	OK	
9	0011 AND	Discarded	
10	0011 XOR	Discarded	
11	1010 XOR	Discarded	
12	0010 AND	Discarded	
13	0010 XOR	Discarded	
14	1101 NOT	OK	
15	1011 NOT	Discarded	
16	1010 NOT	Discarded	
17	1001 AND	Discarded	
18	1001 NOT	Discarded	
19	1001 OR	OK	

The discarded cards are placed under the deck and go on making the fifth row, the sequence of suits is OR, AND, NOT, XOR

The image shows a green rectangular area representing a game board. It contains several cards with binary patterns and logic gates. A box labeled "Fifth row ->" points to a row of four cards: 0001 (OR), 0011 (AND), 1001 (NOT), and 0111 (XOR). The cards are arranged in a grid, with some cards showing logic gate symbols (AND, OR, NOT, XOR) and others showing binary patterns. The cards are numbered 1 through 19, corresponding to the table above.





Sequence of game	Card	Operation	Remarks
1	0001 OR	OK	
2	0010 OR	Discarded	
3	0100 OR	Discarded	
4	0011 NOT	Discarded	
5	1101 OR	OK	
6	0001 AND	OK	
7	0111 XOR	OK	
8	0011 AND	OK	
9	0011 XOR	OK	
10	1010 XOR	Discarded	
11	0010 AND	Discarded	
12	0010 XOR	Discarded	
13	1011 NOT	Discarded	
14	1010 NOT	Discarded	
15	1001 AND	Discarded	
16	1001 NOT	OK	

The game is over because it's not possible to place the other cards correctly.

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