

ROBOGOYO

How to Play **ROBOGOYO**

The game involves a series of interconnected rings and a free oval piece. We start the game with the oval piece being separate from the interconnected rings. The objective of the game is to "lock" the oval piece through all the rings. The following write up will help players understand the rules of locking.

The rings are interconnected with one last ring standing free. This can be numbered 1 and the other rings in order can be numbered 2, 3, 4 etc for our understanding. We have 8 rings in our game, but there could be games with higher or lower number of rings.

Ring 1 can be locked and unlocked at any given point of time in the game.

Any higher numbered ring can be locked or unlocked if the previous ring is locked and all lower numbered rings are unlocked. For example, to lock ring #5, we need to have ring #4 locked and all lower rings (#1, #2, #3) unlocked. As another example, if rings #6 and #7 are locked while #1, #2, #3, #4 and #5 are unlocked, and then at this point, #7 ring can be unlocked.

Steps to play the 8 ring ROBOGOYO. The ring that moves in each step is marked in YELLOW. 0 means ring is in unlocked position. 1 means it is in locked position

| Step | Ring 1 | Ring 2 | Ring 3 | Ring 4 | Ring 5 | Ring 6 | Ring 7 | Ring 8 |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0-start | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Step 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Step 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Step 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Step 4 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Step 5 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| Step 6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Step 7 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Step 8 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Step 9 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Step 10 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| Step 11 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| Step 12 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Step 13 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Step 14 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Step 15 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Step 16 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Step 17 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Step 18 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Step 19 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Step 20 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Step 21 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Step 22 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| Step 23 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| Step 24 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| Step 25 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| Step 26 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Step 27 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| Step 28 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Step 29 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| Step 30 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Step 31 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Step 32 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Step 33 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Step 34 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| Step 35 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| Step 36 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Step 37 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| Step 38 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Step 39 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Step 40 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 |
| Step 41 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 |
| Step 42 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Step 43 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Step 44 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| Step 45 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| Step 46 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| Step 47 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| Step 48 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| Step 49 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Step 50 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| Step 51 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Step 52 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| Step 53 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| Step 54 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| Step 55 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| Step 56 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| Step 57 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| Step 58 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Step 59 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| Step 60 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Step 61 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Step 62 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Step 63 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Step 64 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Step 65 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Step 66 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Step 67 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Step 68 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| Step 69 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| Step 70 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Step 71 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| Step 72 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| Step 73 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| Step 74 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| Step 75 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| Step 76 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Step 77 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Step 78 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| Step 79 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| Step 80 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| Step 81 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| Step 82 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| Step 83 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| Step 84 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Step 85 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| 170=end | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

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The puzzle moves through a specific sequence of locking and unlocking, and the challenge is for the player to understand this sequence and use it correctly till all the rings are locked.

The uniqueness of the game is that for each additional ring that need to be locked, the number of movements (locking or unlocking) doubles. So depending on the number of rings, the number of movements needed to lock all the rings will be as shown next.

| Number of Rings | Number of movements needed to lock all rings |
|-----------------|--|
| 1 | 1 |
| 2 | 2 |
| 3 | 5 |
| 4 | 10 |
| 5 | 21 |
| 6 | 42 |
| 7 | 85 |
| 8 | 170 |
| 9 | 341 |
| 10 | 682 |

There is also another fascinating aspect to the game, which is that at any given point in the game, the player has only two possible movements that can be made. This means that the player will have to make exactly the right movement in each of the steps to finish the puzzle in the shortest possible manner. Any mistake during the game will cause the player to take more number of steps as the wrong steps have to be retracted before the player can continue on the right sequence of moves.

Once all rings are in locked position, the same sequence has to be reversed to make the oval piece free.

You can also check out the unique features of the **ROBOGOYO** GAME APP where you can design your own game and challenge your friends. The GAME APP is available in Android and iOS platforms.