

DESAIN ANALISIS ALGORITMA

ILUSTRASI

Bagian 1

02

ASSIGNMENT PROBLEM



MATRIKS $s_{ix}t_j(m_xn)$

Task 1	Task 2	Task 3	Task 4	
Staff A				
Staff B				
Staff C				
Staff D				

n

m

MENGECEK KEMUNGKINAN

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

PERCOBAAN KE-1

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

PERCOBAAN KE-1

Task 1	Task 2	Task 3	Task 4	$i_0 j_0$
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

$i_0 j_0$

10

PERCOBAAN KE-1

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

$$i_0j_0 + i_1j_1$$

$$10 + 9$$

PERCOBAAN KE-1

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

$$i_0j_0 + i_1j_1 + i_2j_2$$

$$10 + 9 + 15$$

PERCOBAAN KE-1

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

$$i_0j_0 + i_1j_1 + i_2j_2 + i_3j_3$$
$$10 + 9 + 15 + 4$$
$$= 38$$

Biaya

PERCOBAAN KE-1

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

$$i_0j_0 + i_1j_1 + i_2j_2 + i_3j_3$$
$$10 + 9 + 15 + 4$$
$$= 38$$

Biaya

PERCOBAAN KE-2

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

$$i_0j_0 + i_1j_1 + i_3j_2 + i_2j_3$$
$$10 + 9 + 8 + 3$$
$$= 30$$

Biaya

PERCOBAAN KE-2

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

$$i_0j_0 + i_1j_1 + i_3j_2 + i_2j_3$$
$$10 + 9 + 8 + 3$$
$$= 30$$

Biaya

PERCOBAAN KE-n

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

$$i_0j_1 + i_1j_3 + i_2j_0 + i_3j_2$$
$$7 + 2 + 1 + 3$$
$$= 13$$

Biaya

\$13 Biaya Optimal

PERCOBAAN KE-n

.....

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

Pembagian

Task	Staff

Ingat $i = \text{staff}, j = \text{task}$

$i_0 = \text{staff A}, j_0 = \text{task 1}$

$i_1 = \text{staff B}, j_3 = \text{task 2}$

$i_2 = \text{staff C}, j_2 = \text{task 3}$

$i_3 = \text{staff D}, j_3 = \text{task 4}$

\$13 Biaya Optimal

$$i_0j_1 + i_1j_3 + i_2j_0 + i_3j_2$$

.....

$$7 + 2 + 1 + 3 = 13$$

Biaya

PERCOBAAN KE-n

Task 1	Task 2	Task 3	Task 4	
10	7	5	6	Staff A
8	9	3	2	Staff B
1	6	15	8	Staff C
12	7	3	4	Staff D

\$13 Biaya Optimal

Pembagian

Task	Staff
2	A
4	B
1	C
3	D

Ingat $i = \text{staff}, j = \text{task}$

$i_0 = \text{staff A}, j_0 = \text{task 1}$

$i_1 = \text{staff B}, j_1 = \text{task 2}$

$i_2 = \text{staff C}, j_2 = \text{task 3}$

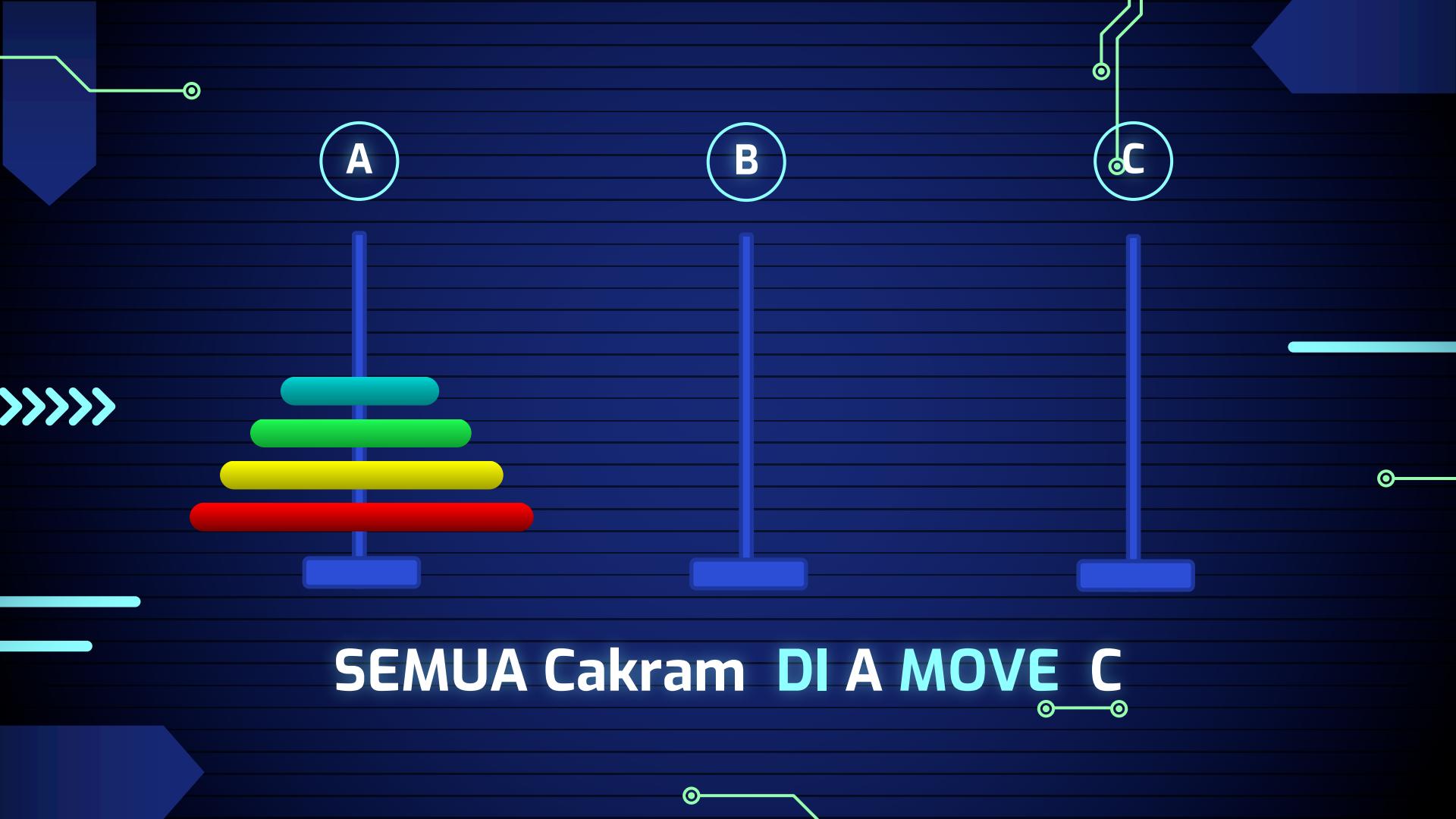
$i_3 = \text{staff D}, j_3 = \text{task 4}$

Bagian 2

02

TOWER OF HANOI

ILUSTRASI



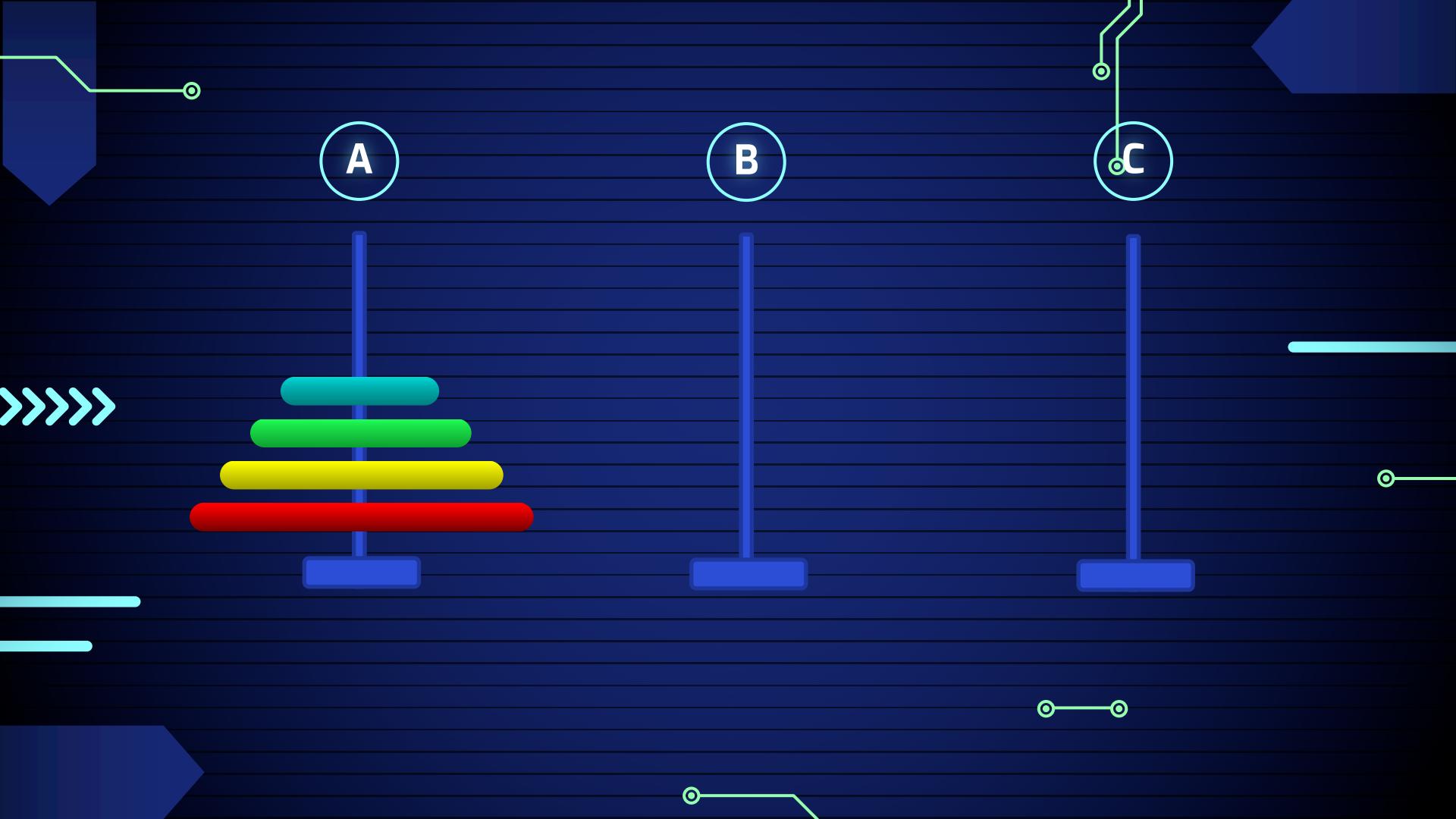
SEMUA Cakram DI A MOVE C

A

B

C

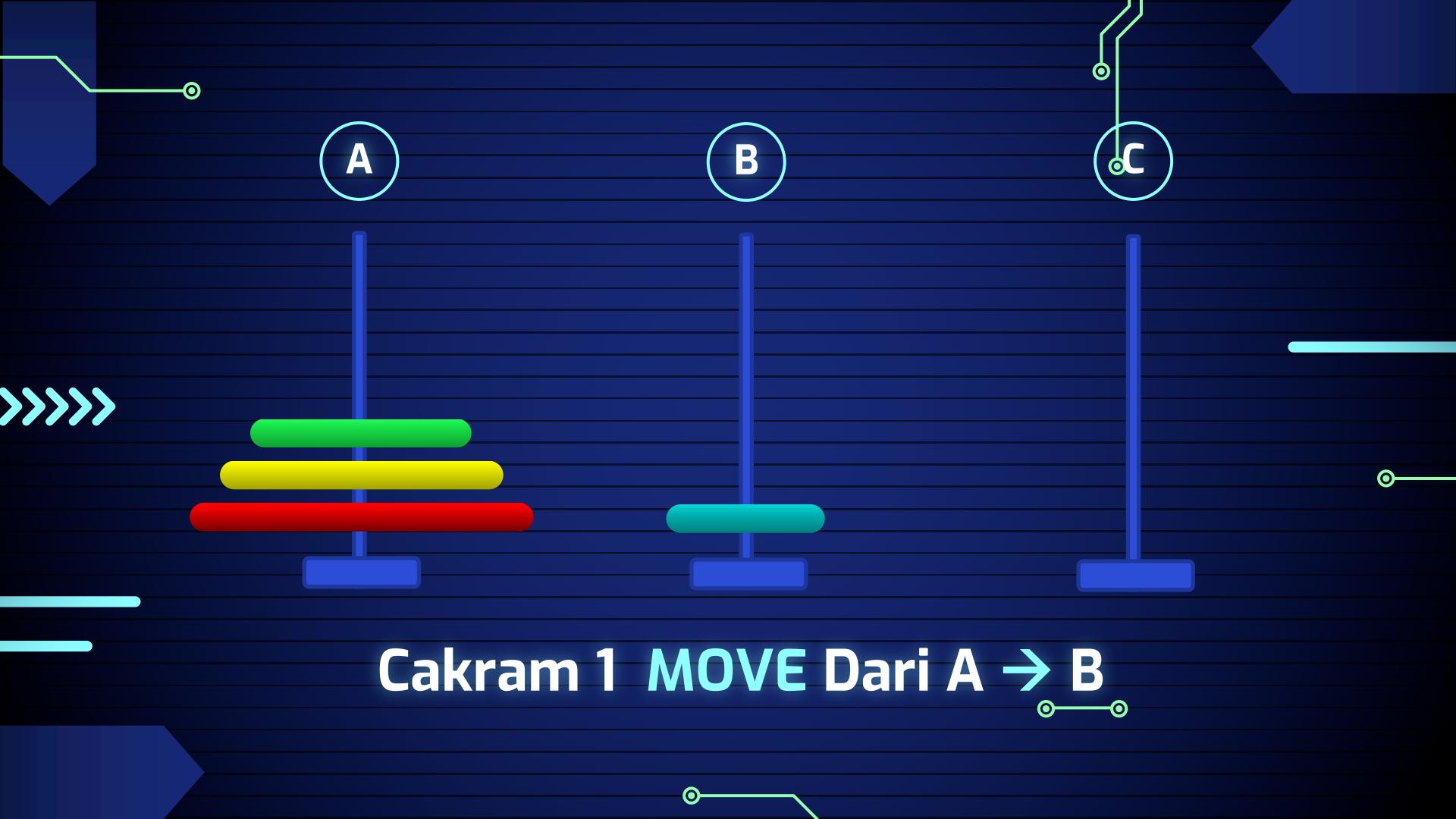
SEMUA Cakram DI C



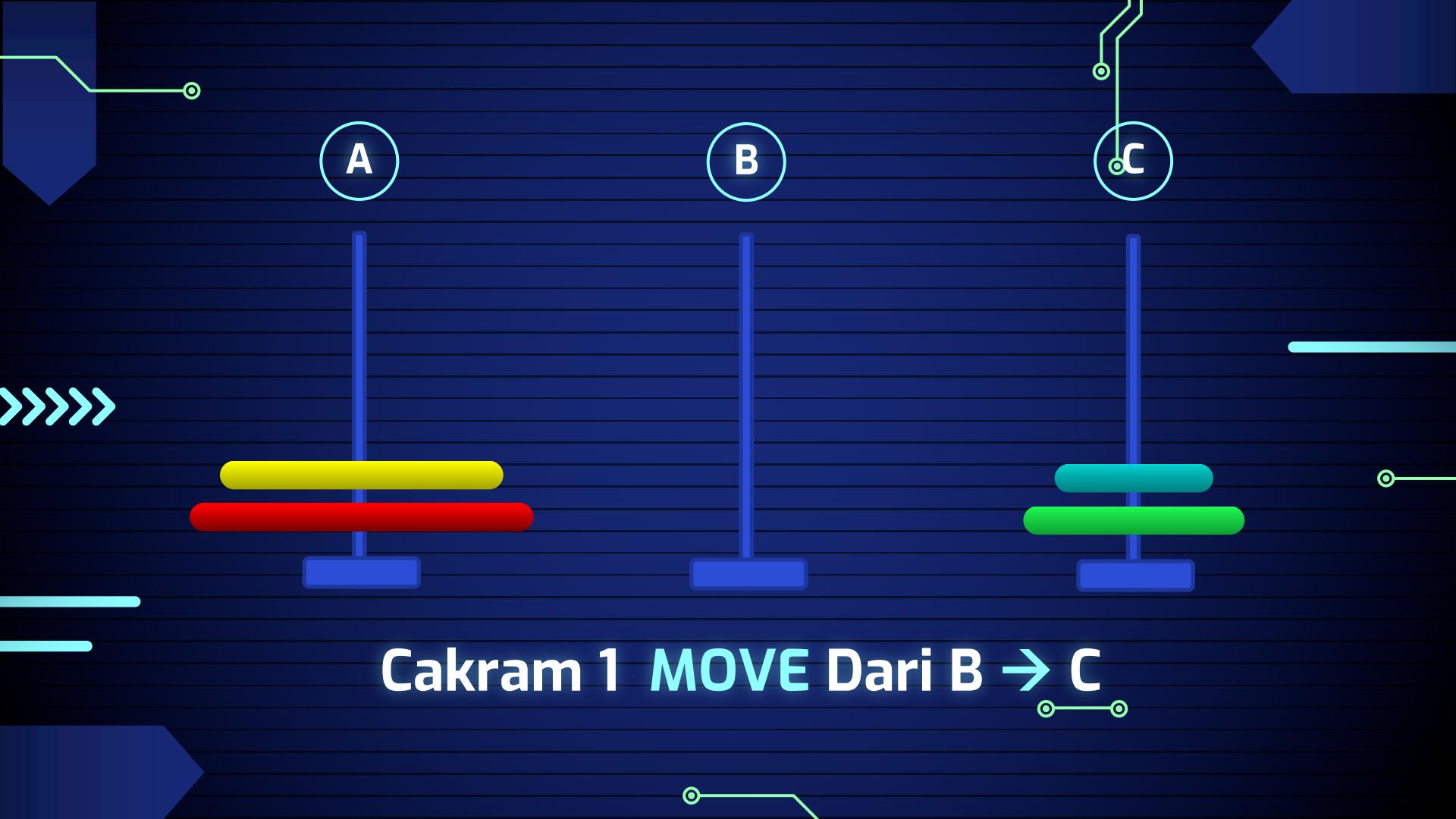
A

B

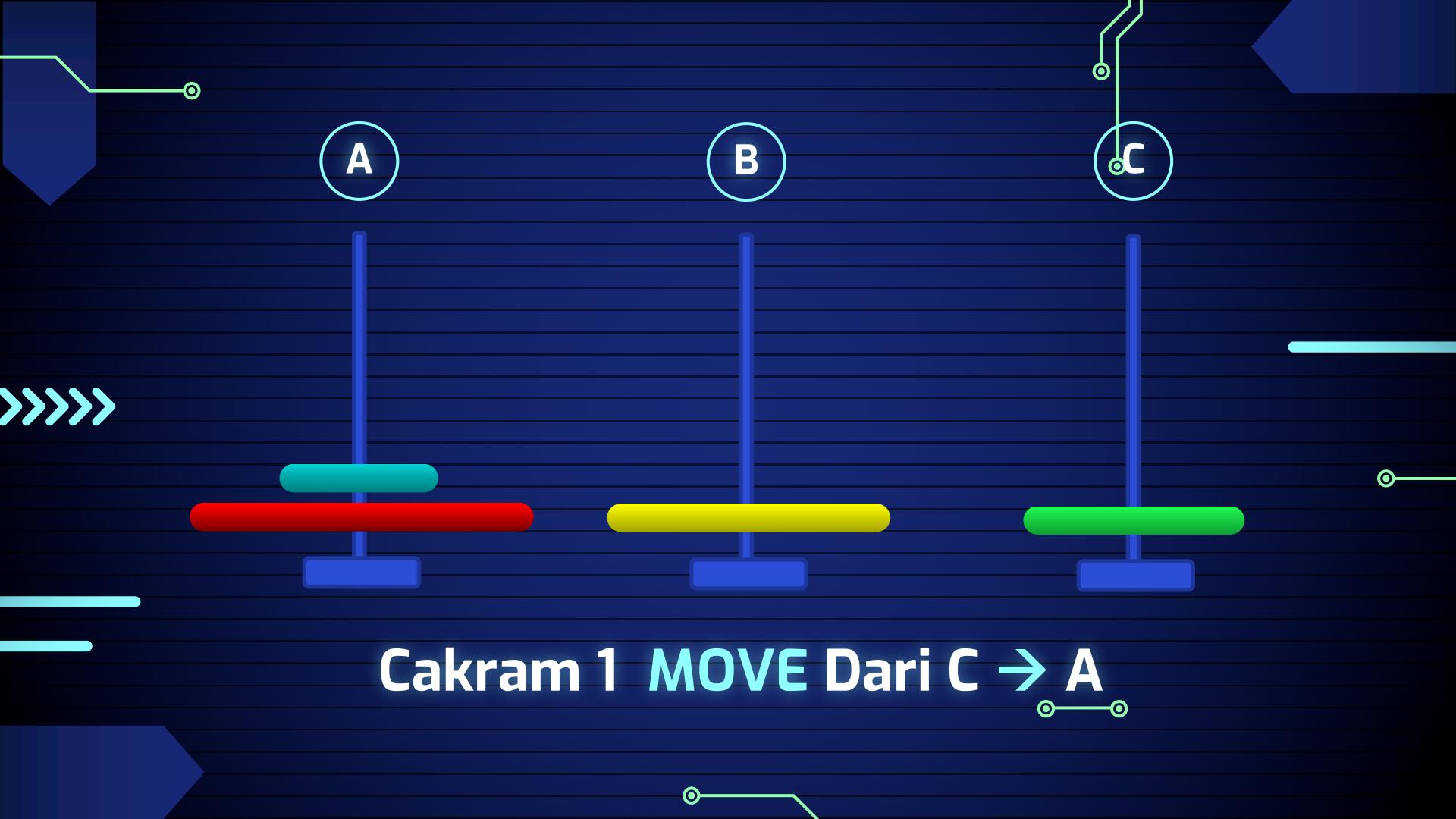
C



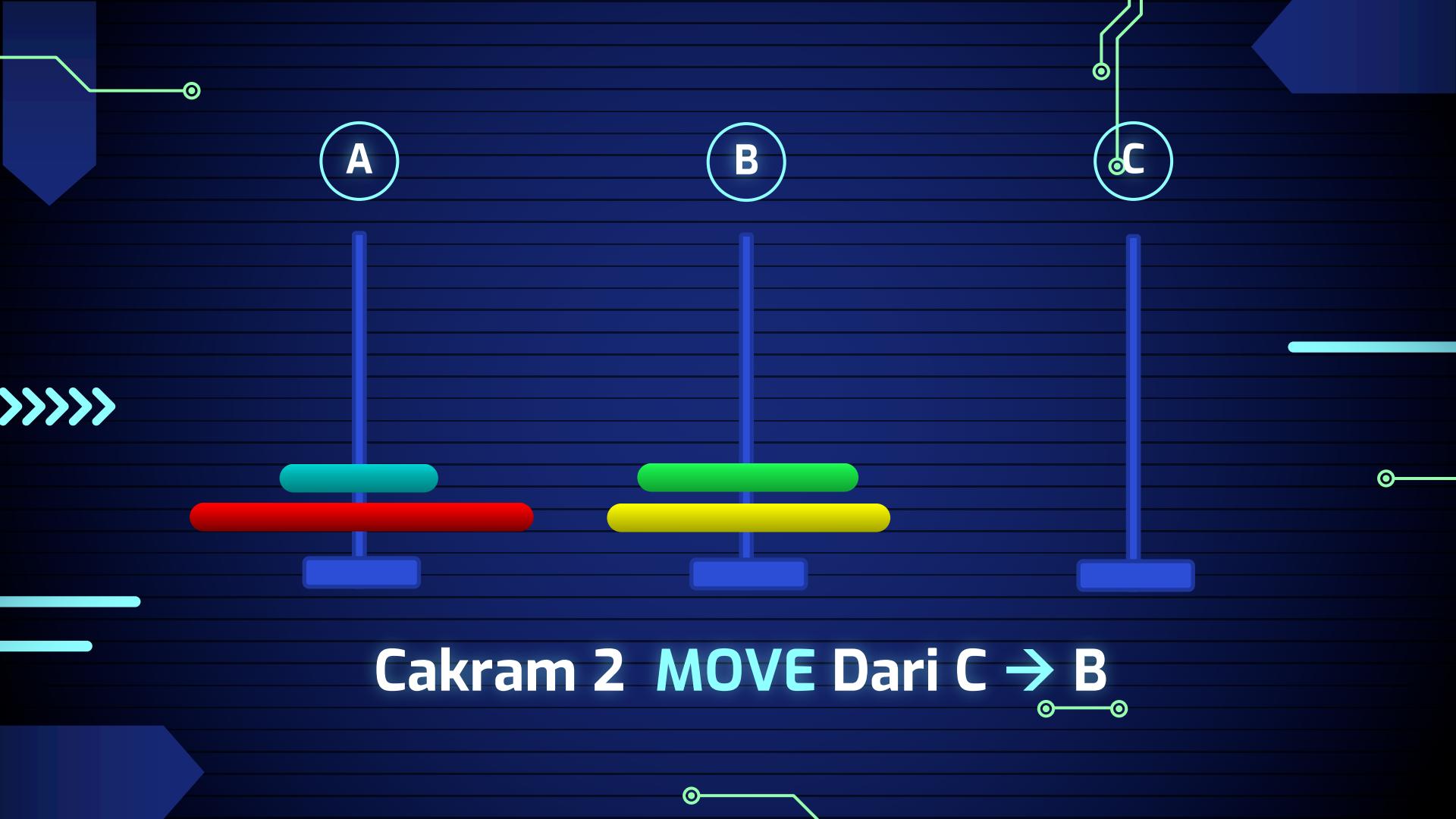
Cakram 2 MOVE Dari A → 2



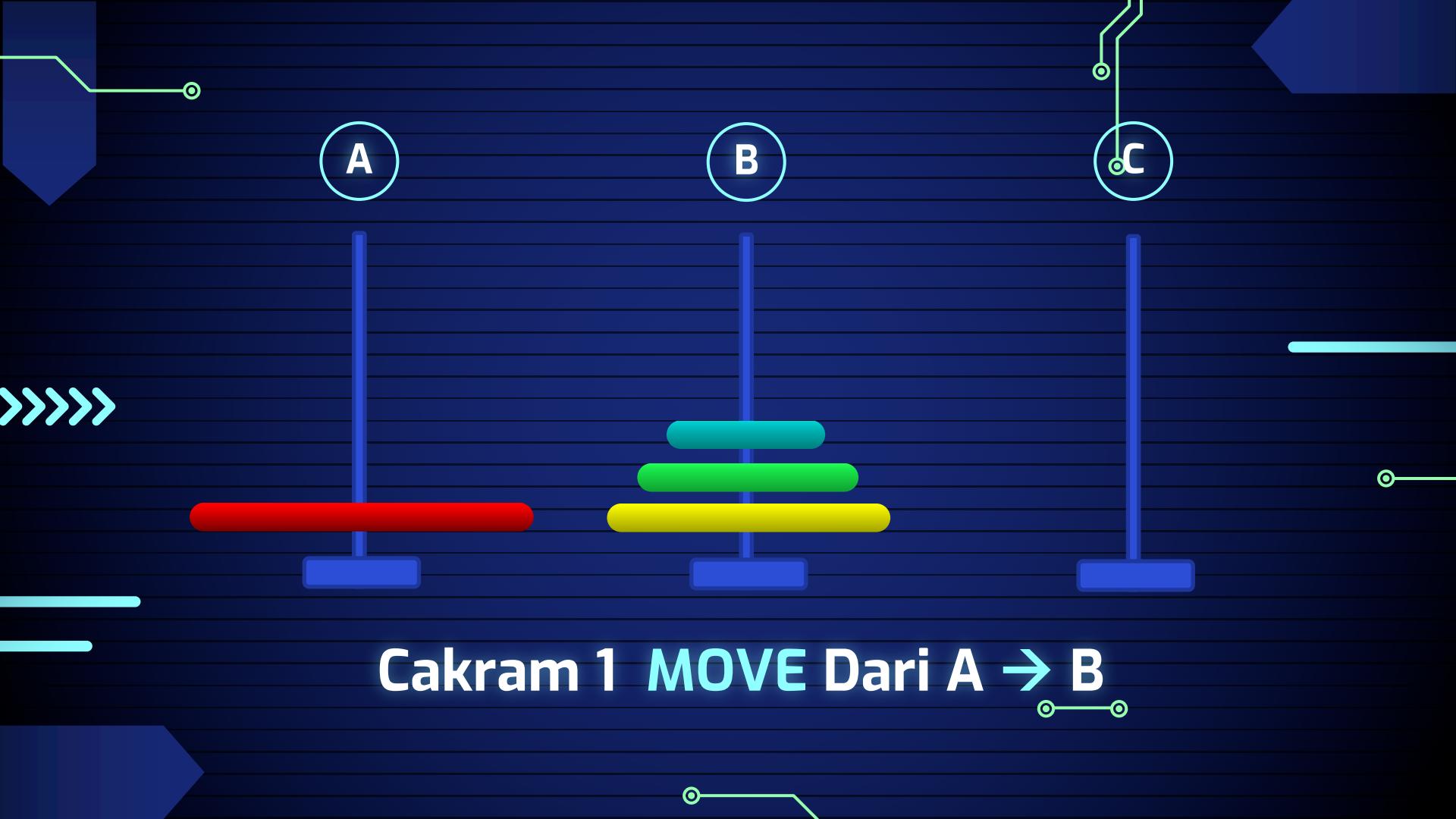
Cakram 3 MOVE Dari A → B



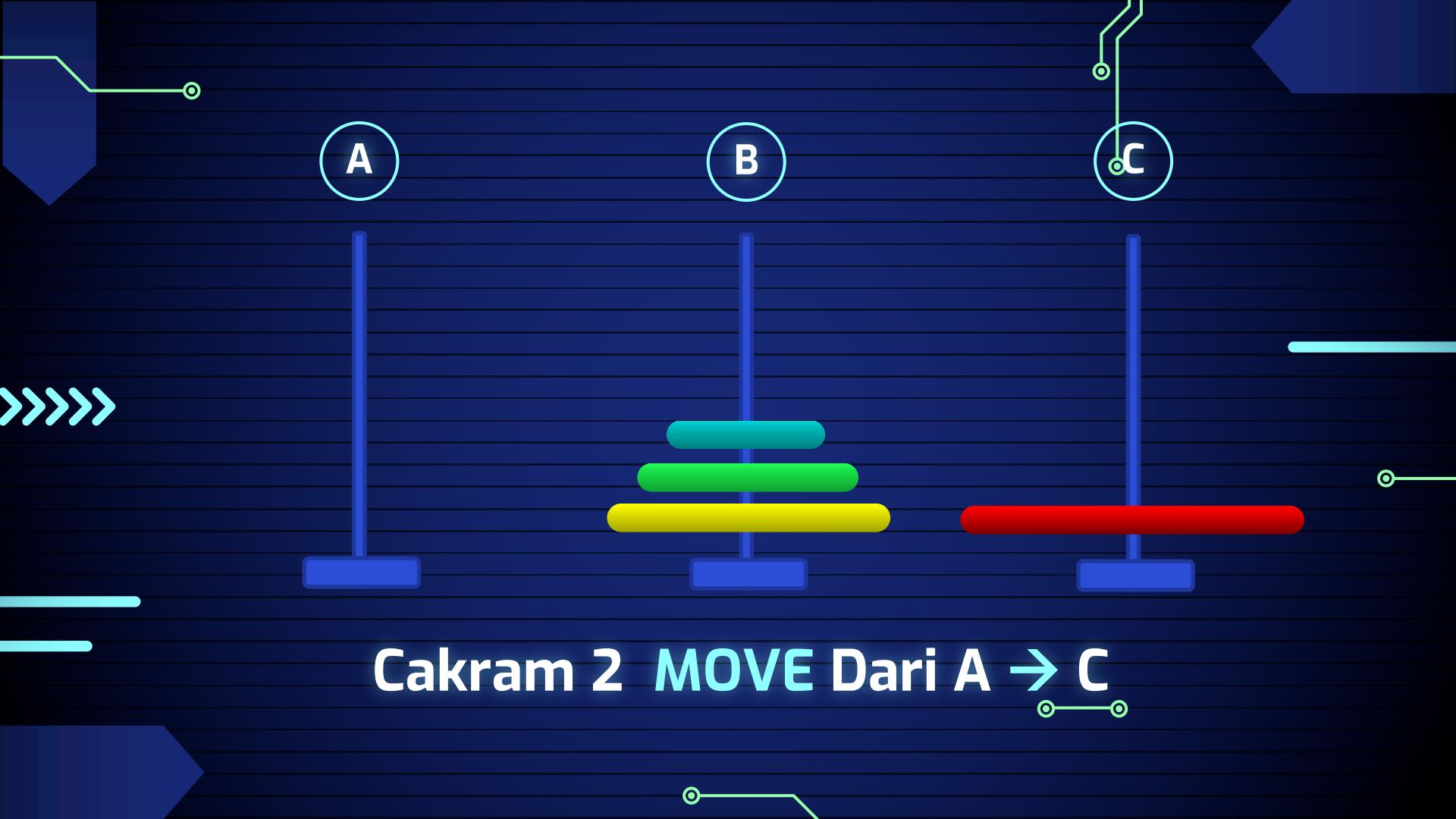
Cakram 1 MOVE Dari C → A

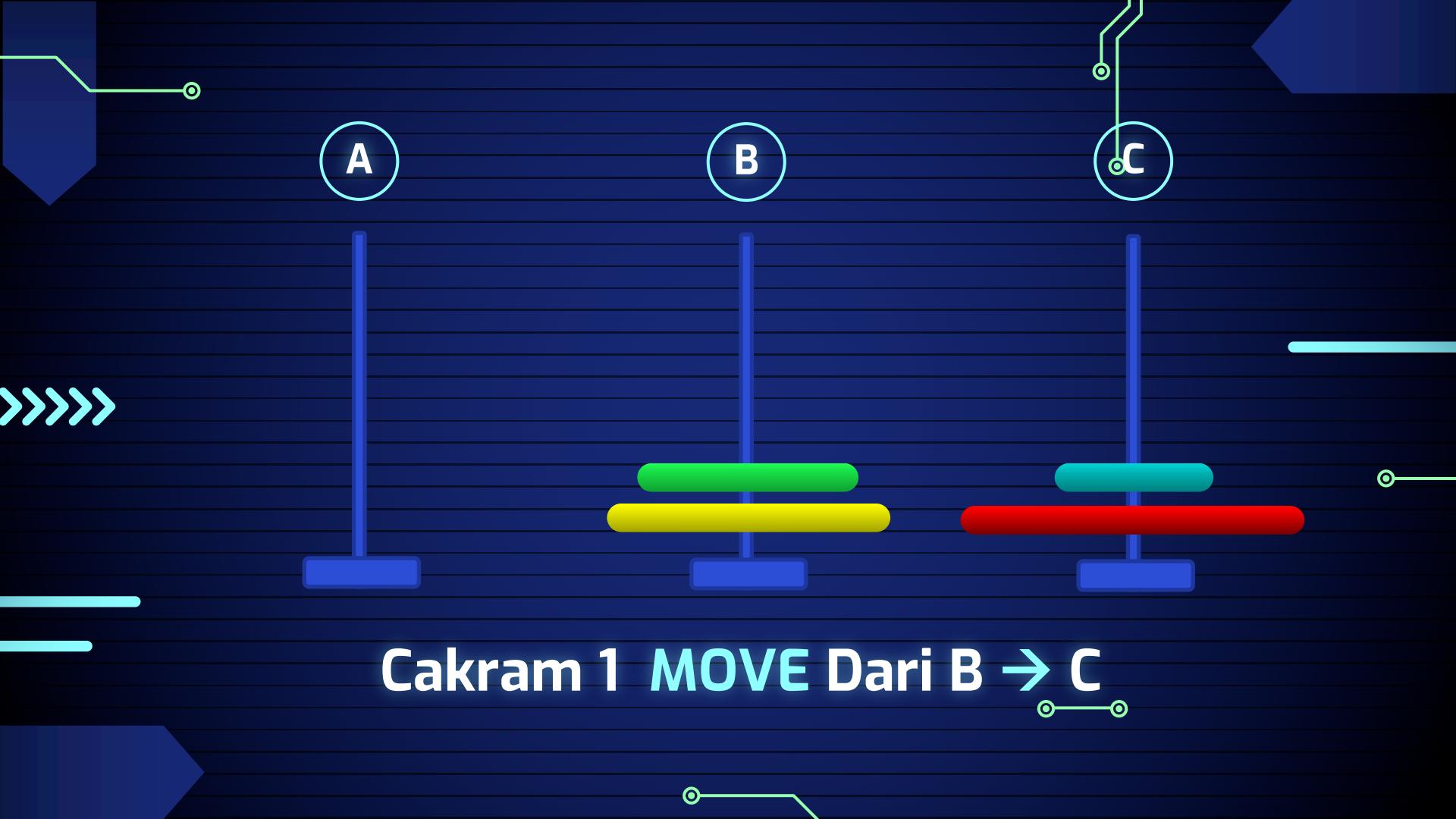


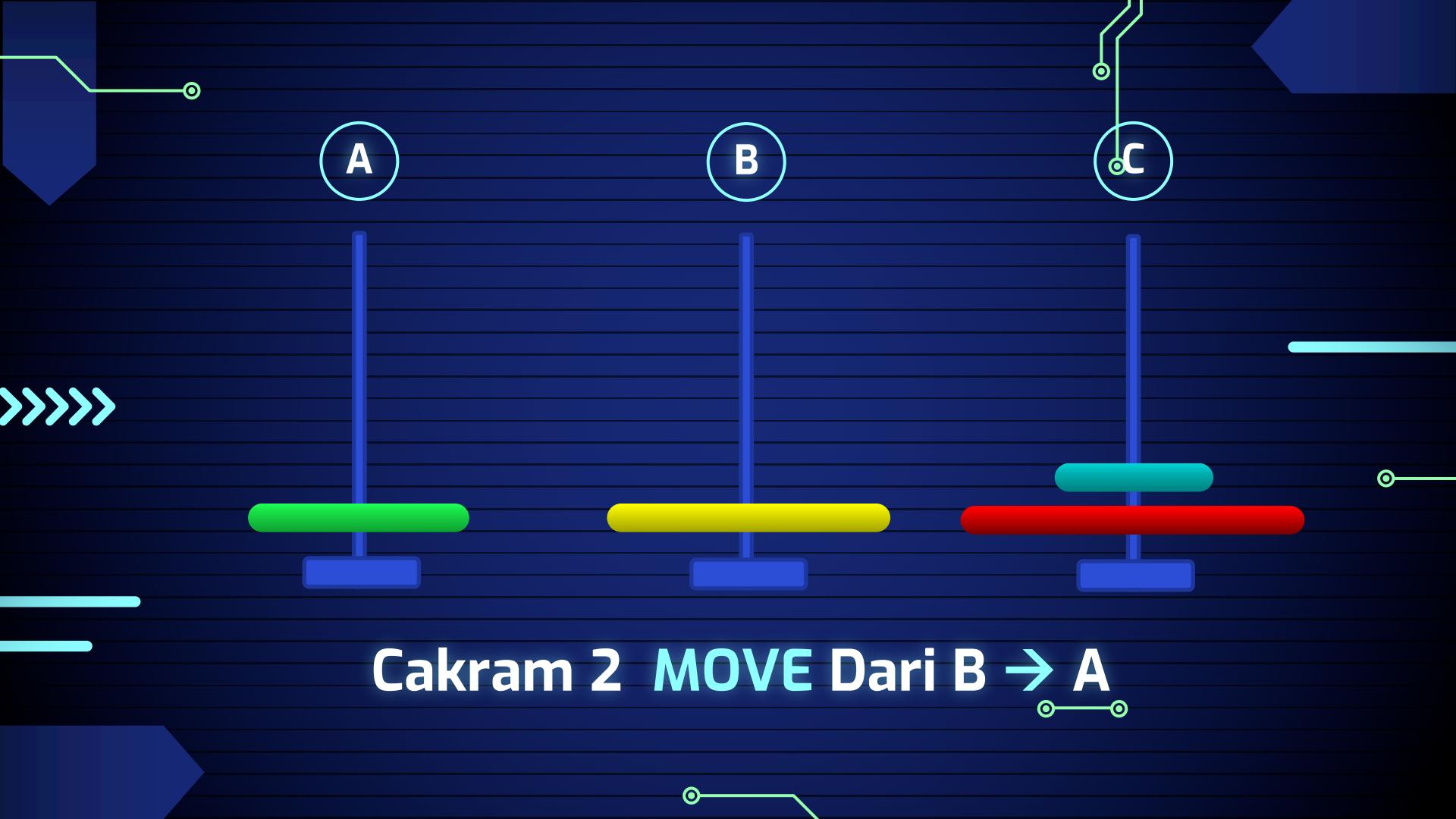
Cakram 2 MOVE Dari C → B



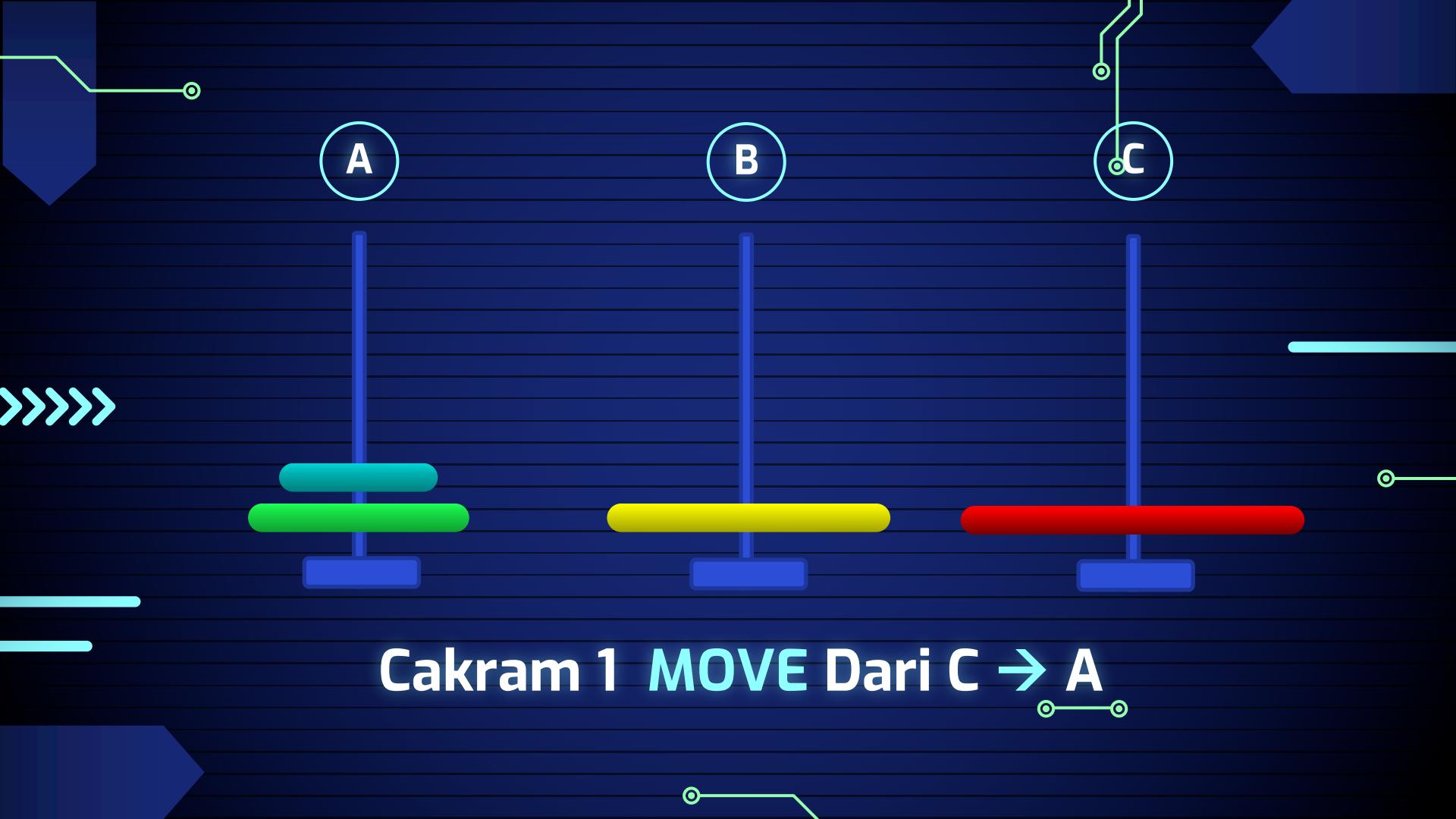
Cakram 1 MOVE Dari A → B

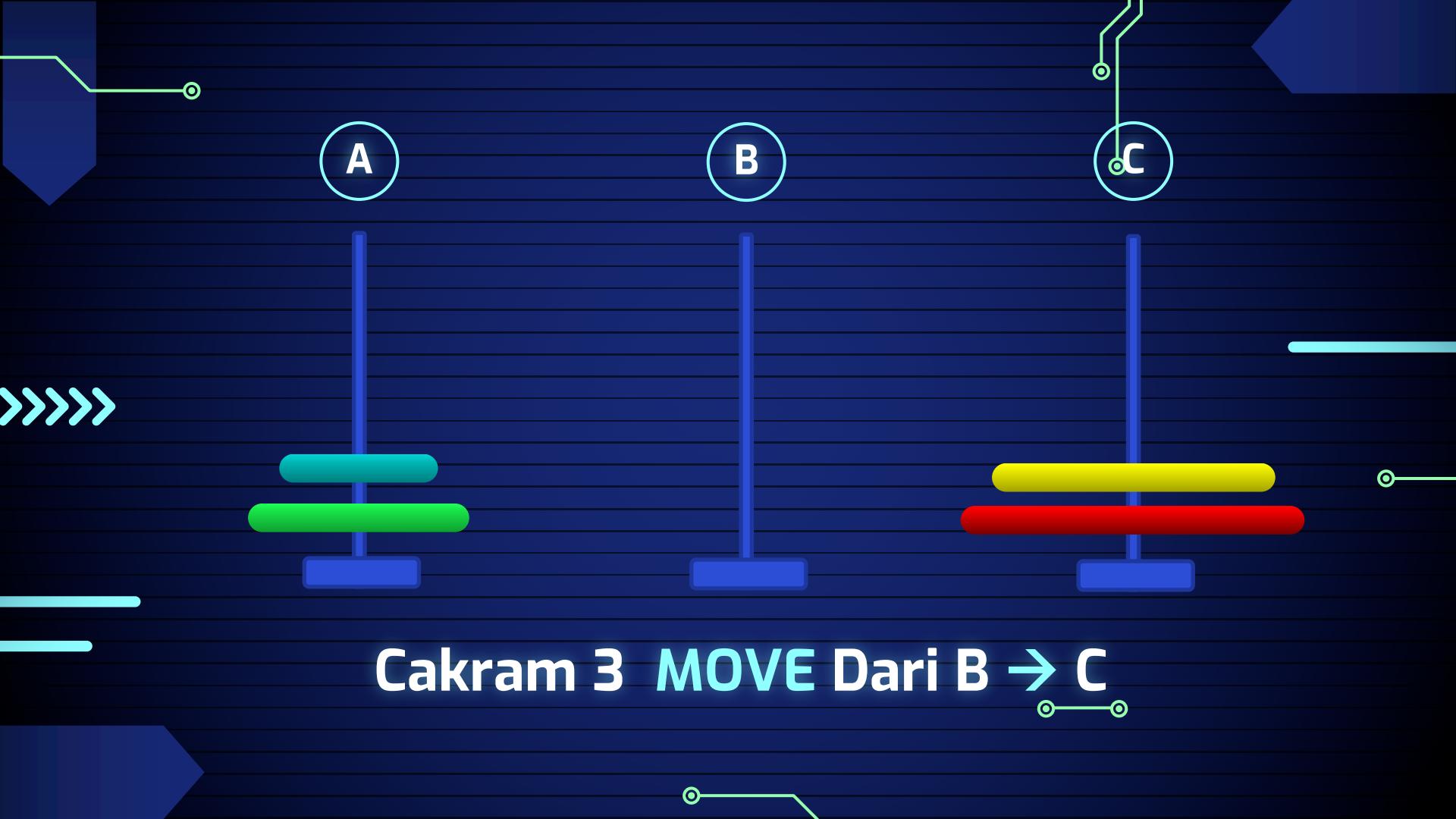




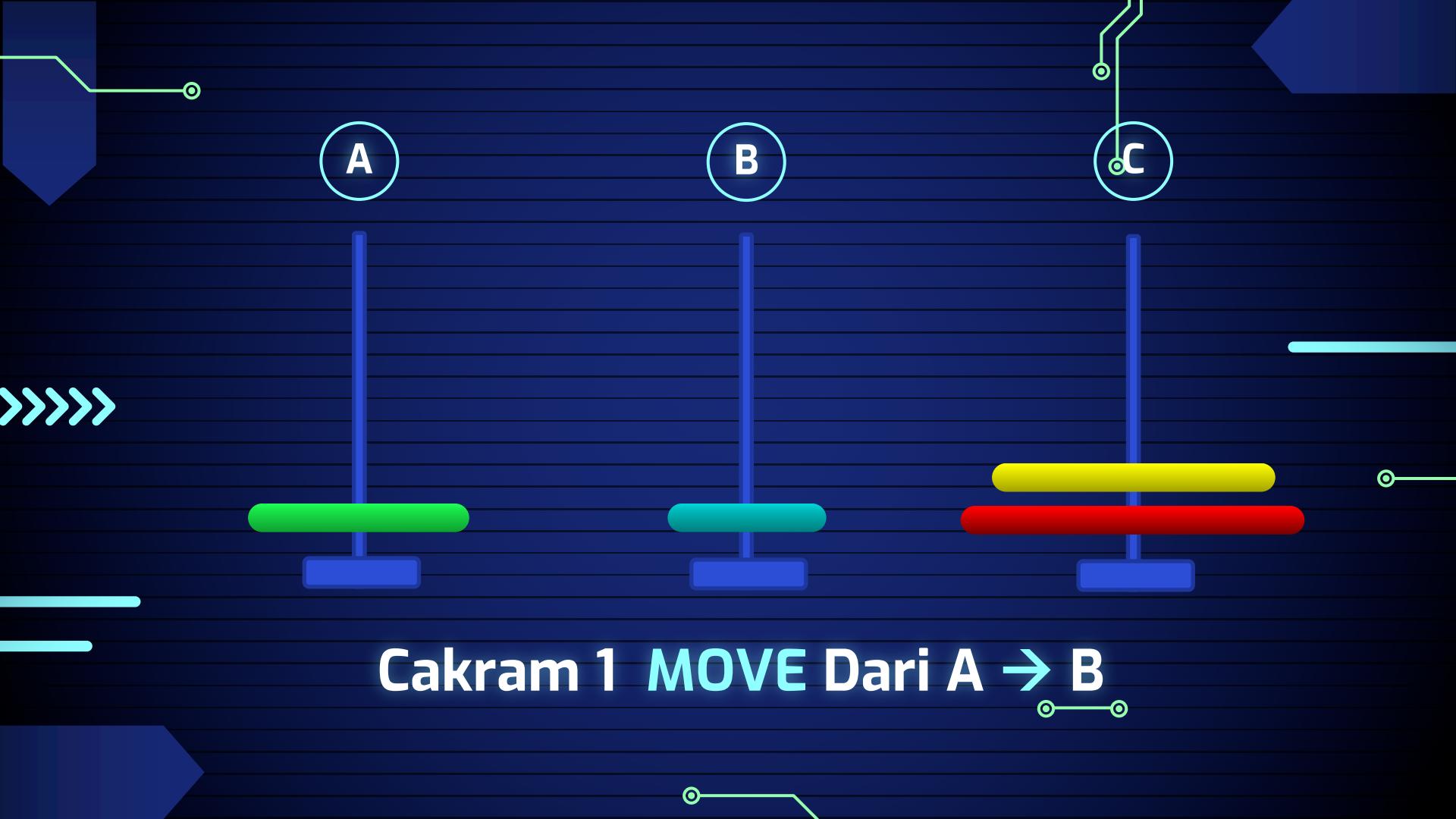


Cakram 2 MOVE Dari B → A

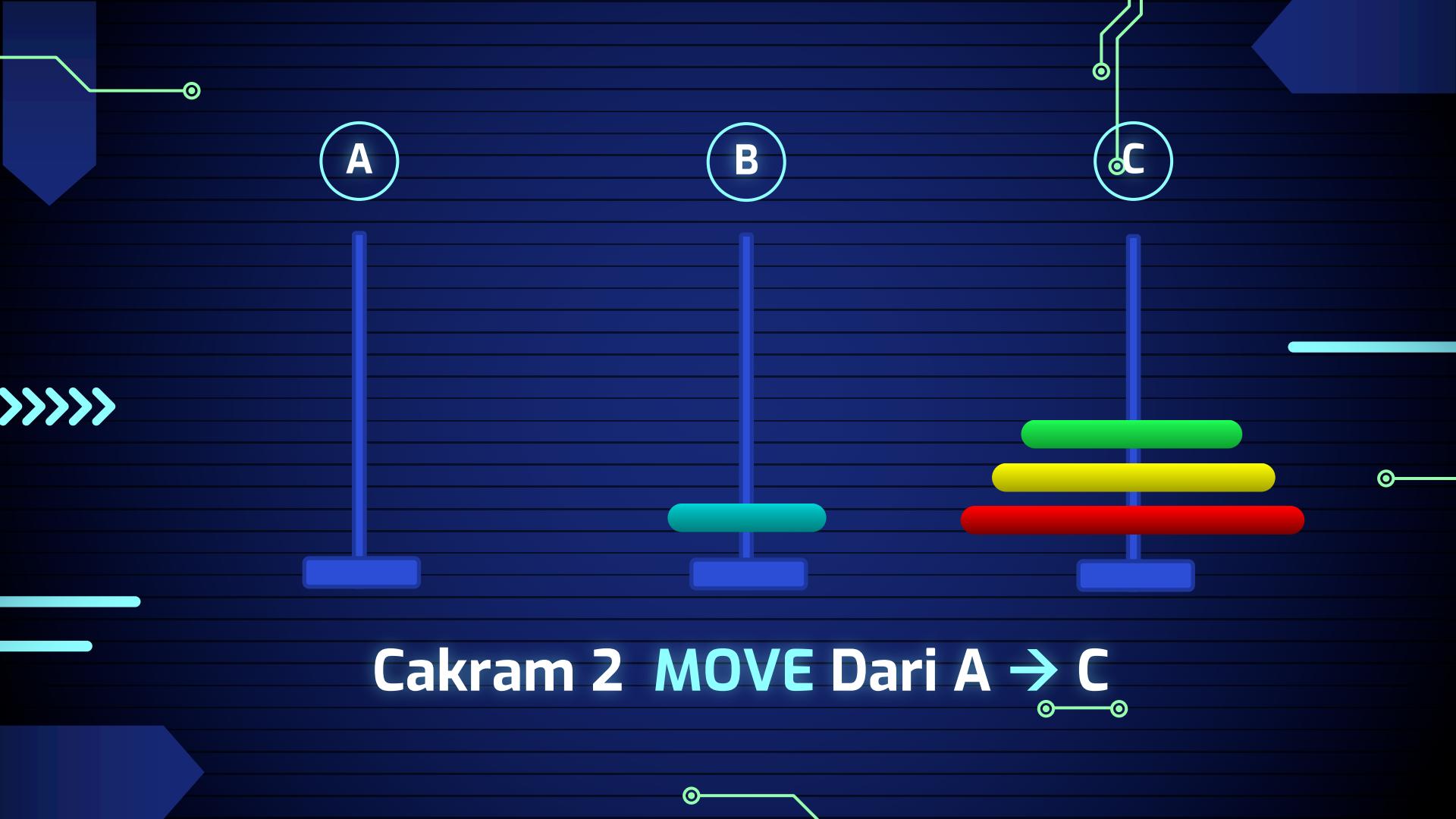




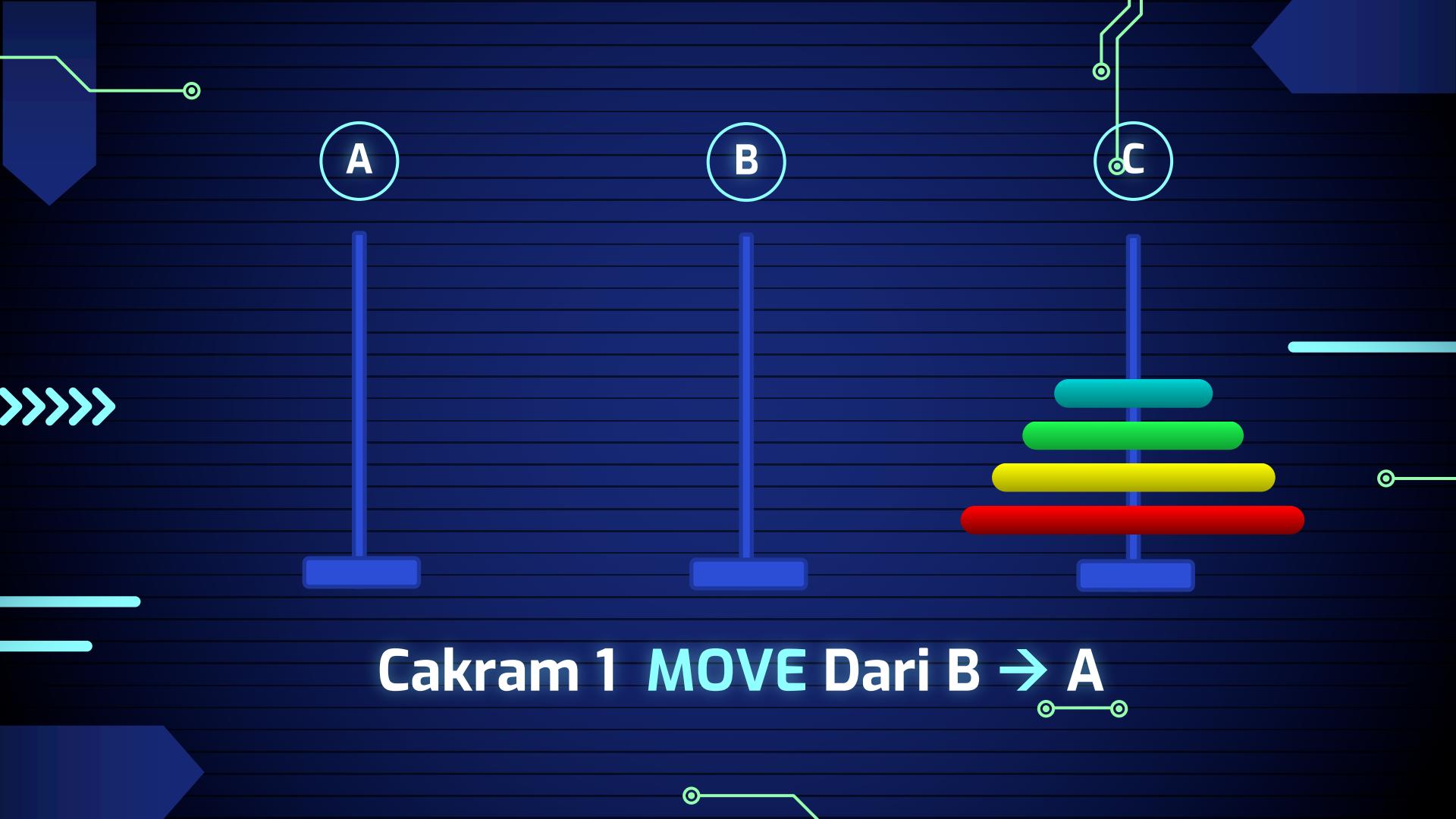
Cakram 3 MOVE Dari B → C



Cakram 1 MOVE Dari A → B



Cakram 2 MOVE Dari A → C



SEMUA Cakram DI C