

Solution: The border table is built as follows:

1.

	CTTGCTTGTCTGG												
j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	0	0	0	0	0	0	0	0	0

No border found.

2.

	CTTGCTTGTCTGG												
j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	0	0	0	0	0	0	0	0	0

No border found.

3.

	CTTGCTTGTCTGG												
j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	0	0	0	0	0	0	0	0	0

No border found.

4.

	CTTGCTTGTCTGG												
j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	0	0	0	0	0	0	0	0	0

No border found.

5.

	CTTGCTTGTCTGG												
j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	0	0	0	0	0	0	0	0	0

No border found.

6.

	CTTGCTTGTCTGG												
j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	1	0	0	0	0	0	0	0	0

A border of length 1 is found.

7.

$$\text{CTTGCTTGTCTGG}$$

j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	1	2	0	0	0	0	0	0	0

A border of length **2** is found.

8.

$$\text{CTTGCTTGTCTGG}$$

j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	1	2	3	0	0	0	0	0	0

A border of length **3** is found.

9.

$$\text{CTTGCTTGTCTGG}$$

j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	1	2	3	4	0	0	0	0	0

A border of length **4** is found.

10.

$$\text{CTTGCTTGTCTGG}$$

j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	1	2	3	4	0	0	0	0	0

No border found.

11.

$$\text{CTTGCTTGTCTGG}$$

j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	1	2	3	4	0	1	0	0	0

A border of length **1** is found.

12.

$$\text{CTTGCTTGTCTGG}$$

j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	1	2	3	4	0	1	2	0	0

A border of length **2** is found.

13.

$$\text{CTTGCTTGTCTGG}$$

j	0	1	2	3	4	5	6	7	8	9	10	11	12
B(j)	0	0	0	0	1	2	3	4	0	1	2	0	0

No border found.