Lempel Ziv Coding

given Data Sequence

A A B A B B B A B A A B A B B A B B A B B

Data Segment

A | A B | A B B | B | A B A | A B A B | B B | A B B A | B B |

position	1	2	3	4	5	6	7	8	9
Sequence	A	AB	ABB	B	ABA	ABAB	BB	ABBA	BB
Numerical presentation	A	B	B	B	A	B	B	A	7
	6A	1B	2B	0B	2A	5B	4B	3A	7

A → 0
B → 1

Coding	0	1	1	1	0	1	1	0

coding	0	11	101	1	100	1011	1001	110	111

Lempel Ziv coding   0000 0011 0101 0001 0100 1011 1001 0110 0111

Lempel Ziv Coding

given Data Sequence

0 001 0111 00 10 1 0 0 1 01

· 0, 1 already stored.

Data Segment
0 0| 01| 0 1 1| 1 0|0 1 0|1 0 0|1 01

Position	1	2	3	4	5	6	7	8	9
Sequence	0	1	00	01	011	10	010	100	101
Numerical presentation	0	1	0 0	0 1	0 1 1	1 0	0 1 0	1 0 0	1 0 1
	00	01	00	11	41	20	40	60	61

$0 \rightarrow 0$
$1 \rightarrow 1$

Coding	0	1	10	11	1001	100	1000	1100	1101
Lempel Ziv	0000	0001	0010	0011	1001	0100	1000	1100	1101