Text = AABABABAA

dictionary: A:0 B:1
codeword length: 1

step	position in string	longest string in dictionary	b	add to dictionary	code
1	1				

Text = AABABABAA

dictionary: A:0 B:1 AA:2

step	position in string	longest string in dictionary	b	add to dictionary	code
1	1	A	0	AA	10

Text = A A B A B A B A A

dictionary: A:0 B:1 AA:2

step	position in string	longest string in dictionary	b	add to dictionary	code
1	1	A	0	AA	10
2	2	Α	00		

Text = A A B A B A B A A

dictionary: A:0 B:1 AA:2 AB:3

step	position in string	longest string in dictionary	b	add to dictionary	code
1	1	A	0	AA	10
2	2	А	00	AB	11

Text = A A B A B A B A A

dictionary: A:0 B:1 AA:2 AB:3

step	position in string	longest string in dictionaryb dictionaryadd to dictionary		code	
1	1	А	0	AA	10
2	2	A	00	AB	11
3	3	В	01		

Text = A A B A B A B A A

dictionary: A:0 B:1 AA:2 AB:3 BA:4

step	position in string	longest string in b add to dictionary		code	
1	1	А	0	AA	10
2	2	A	00	AB	11
3	3	В	01	ВА	100

Text = A A B A B A B A A

dictionary: A:0 B:1 AA:2 AB:3 BA:4

step	position in string	longest string in dictionary	b add to dictionary		code
1	1	А	0	AA	10
2	2	A	00	AB	11
3	3	В	01	ВА	100
4	4	AB	011		
			_		

Text = A A B A B A B A A

dictionary: A:0 B:1 AA:2 AB:3 BA:4 ABA:5

step	position in string	longest string in dictionary	b	add to dictionary	code
1	1	Α	0	AA	10
2	2	A	00	AB	11
3	3	В	01	ВА	100
4	4	AB	011	ABA	101
					_

Text = A A B A B A B A A

dictionary: A:0 B:1 AA:2 AB:3 BA:4 ABA:5

step	position in string	longest string in b add to dictionary		code	
1	1	A	ary dictionary  0 AA		10
2	2	A	00	AB	11
3	3	В	B 01 BA		100
4	4	AB	011	ABA	101
5	6	ABA	101		

Text = A A B A B A B A A

dictionary: A:0 B:1 AA:2 AB:3 BA:4 ABA:5 ABAA:6

step	position in string	longest string in dictionary			code
1	1	А	A 0 AA		10
2	2	A	00	AB	11
3	3	В	01	ВА	100
4	4	AB			101
5	6	ABA 101 ABAA		110	

Text = A A B A B A B A A

dictionary: A:0 B:1 AA:2 AB:3 BA:4 ABA:5 ABAA:6

step	position in string	longest string in dictionary	b	add to dictionary	code
1	1	A O AA		10	
2	2	A 00 AB		11	
3	3	В	01	ВА	100
4	4	AB	AB 011 ABA		101
5	6	ABA	101	ABAA	110
6	9	A	000		

Compressed file: 0000101110100

dictionary: A:0 B:1
codeword length: 1

step	position in file	old string	code from dictionary	string	add to dictionary	code
0	1	-	0	Α		

Compressed file: 0000101110100

dictionary: A:0 B:1
codeword length: 2

step	position in file	old string	code from dictionary	string	add to dictionary	code
0	1	-	0	Α	-	_

Compressed file: 0000101110100

dictionary: A:0 B:1 AA:2

step	position in file	old string	code from dictionary	string	add to dictionary	code
0	1	1	0	Α	-	_
1	2	Α	00	Α	AA	10

Compressed file: 000<mark>01</mark>01110100

dictionary: A:0 B:1 AA:2 AB:3

step	position in file	old string	code from dictionary	string	add to dictionary	code
0	1	-	0	Α	1	_
1	2	Α	00	Α	AA	10
2	4	Α	01	В	AB	11

Compressed file: 00001<mark>011</mark>10100

dictionary: A:0 B:1 AA:2 AB:3 BA:4

step	position in file	old string	code from dictionary	string	add to dictionary	code
0	1	-	0	Α	1	_
1	2	А	00	Α	AA	10
2	4	А	01	В	AB	11
3	6	В	011	AB	ВА	100

Compressed file: 0000101110100

dictionary: A:0 B:1 AA:2 AB:3 BA:4

codeword length: 3

step	position in file	old string	code from dictionary	string	add to dictionary	code
0	1	1	0	Α	1	_
1	2	Α	00	Α	AA	10
2	4	Α	01	В	AB	11
3	6	В	011	AB	BA	100
4	9	AB	101			

not in the dictionary use s = oldS + oldS.charAt(0)

Compressed file: 0000101110100

dictionary: A:0 B:1 AA:2 AB:3 BA:4 ABA:5

step	position in file	old string	code from dictionary	string	add to dictionary	code
0	1	1	0	Α	1	_
1	2	А	00	Α	AA	10
2	4	Α	01	В	AB	11
3	6	В	011	AB	ВА	100
4	9	AB	101	ABA	ABA	101

not in the dictionary use 
$$s = oldS + oldS.charAt(0)$$
  
=  $AB + A = ABA$ 

Compressed file: 0000101110100

dictionary: A:0 B:1 AA:2 AB:3 BA:4 ABA:5 ABAA:6

codeword length: 3

step	position in file	old string	code from dictionary	string	add to dictionary	code
0	1	1	0	Α	-	_
1	2	А	00	Α	AA	10
2	4	Α	01	В	AB	11
3	6	В	011	AB	ВА	100
4	9	AB	1010	ABA	ABA	101
5	13	ABA	00	Α	ABAA	110

Text = AABABABAA