3.6.3: 0) -a-> (1) -a-> (2) -b-> (2) -b-> ((3))

$$(0) -a > (0) -a > (0) -b > (0) -b > (0)$$

$$(0) -a > (0) -a > (1) -b > (1) -b > (1)$$

$$(0) -a > (1) -a > (1) -b > (1) -b > (1)$$

(0) -a-> (1) -a-> (2) -b-> (2) -
$$\epsilon$$
-> (0) -b-> (0)

(0) -a-> (1) -a-> (2) -
$$\epsilon$$
-> (0) -b-> (0) -b-> (0)

Yes, this NFA accepts aabb

3.6.4: No paths labeled aabb in this NFA. This NFA does not accept aabb

3.6.5: a-

State	Input(a)	input(b)	input(ε)
0	{0, 1}	{0}	Ø
1	{1, 2}	{1}	Ø
2	{2}	{2,3}	{0}
3	Ø	Ø	Ø

b-

State	input(a)	input(b)	input(ε)
0	{1}	Ø	{3}
1	Ø	{2}	{0}
2	Ø	{3}	{1}
3	{0}	Ø	{2}

3.7.3: a- Transition Table:

State	а	b
A: 0,1,2,3,7	В	С
B: 1,2,3,4,6,7	В	С
C: 1,2,3,5,6,7	В	С

