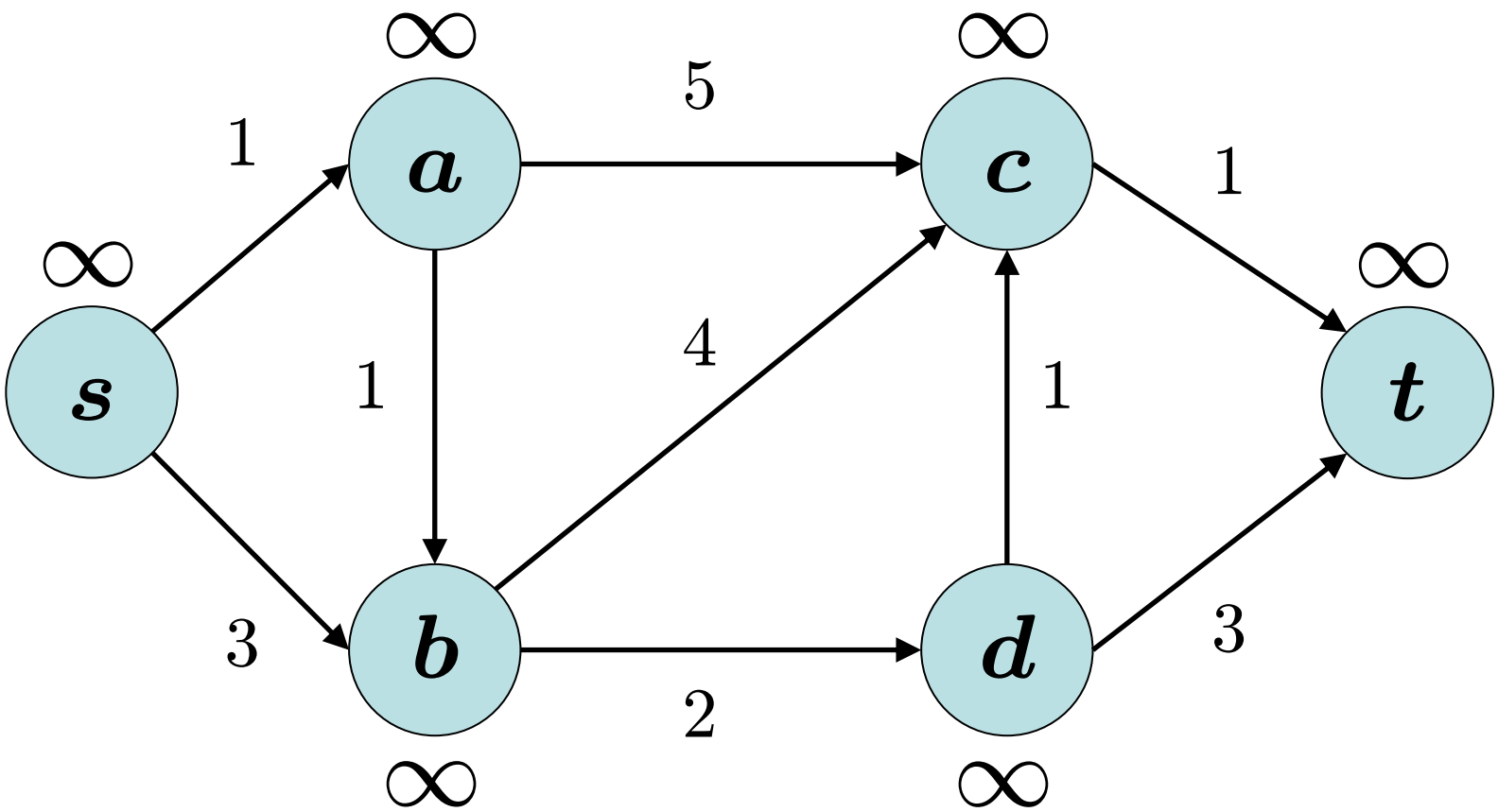
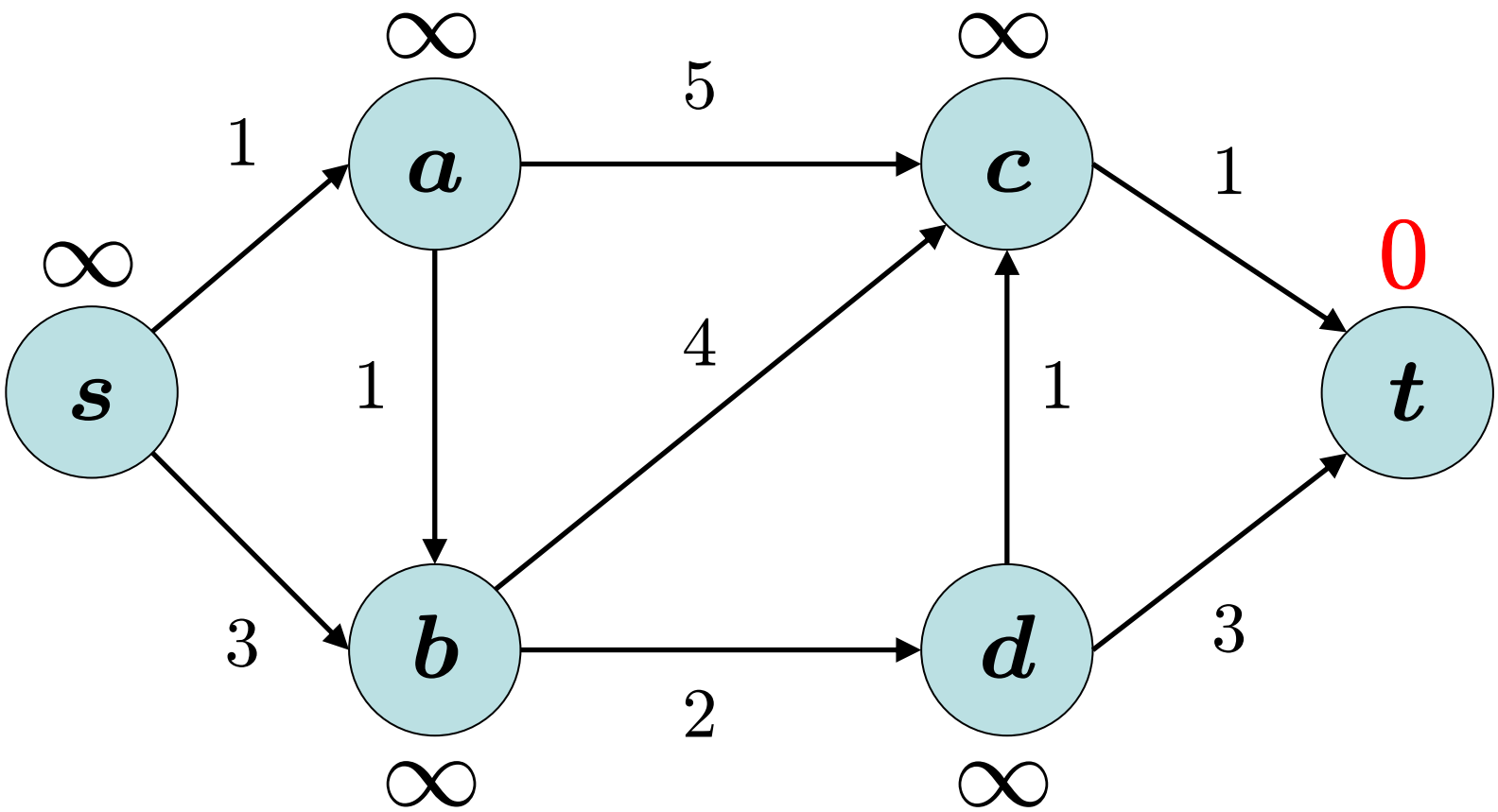
AsynchDP Example

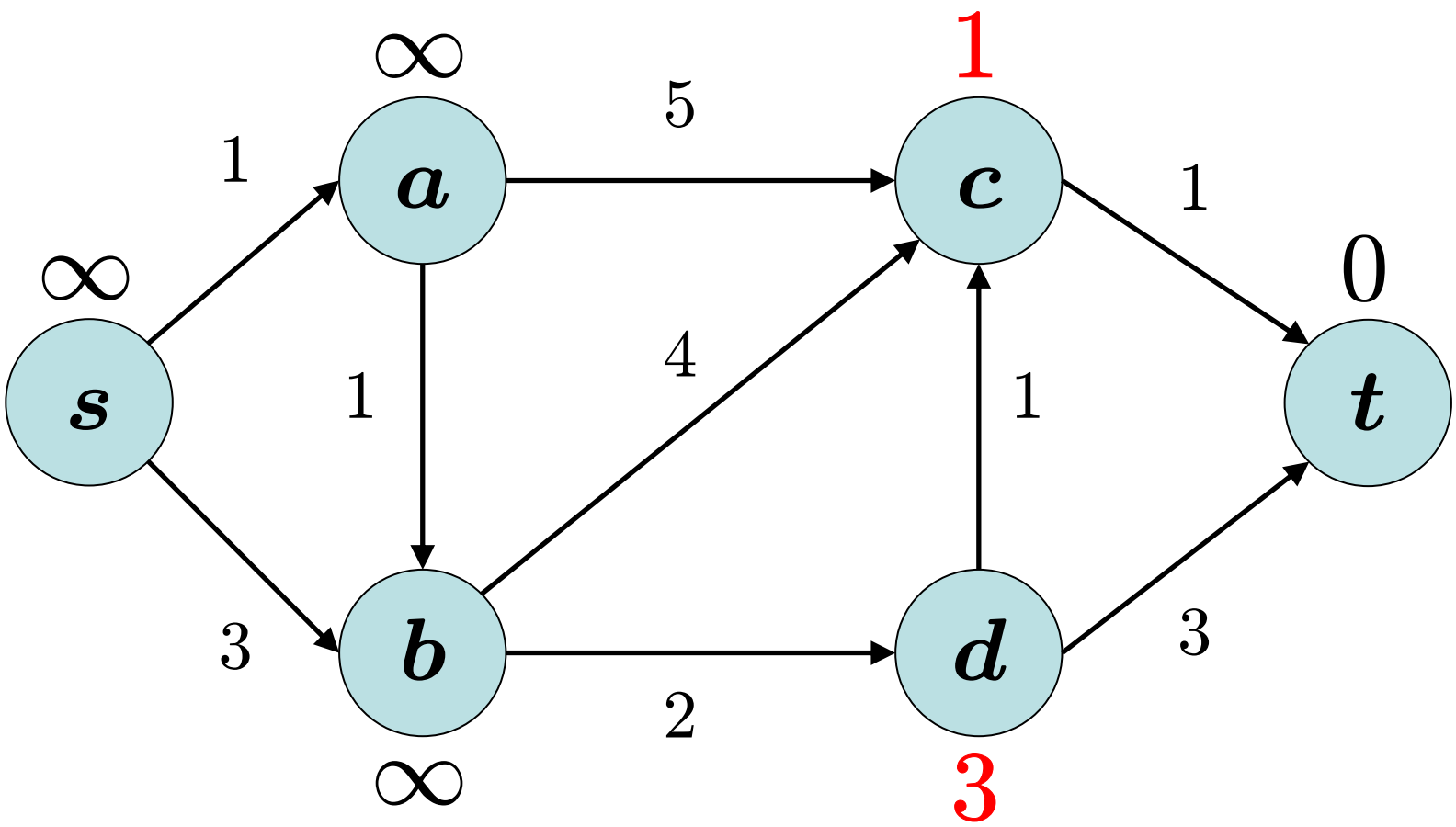
AsynchDP: initial graph



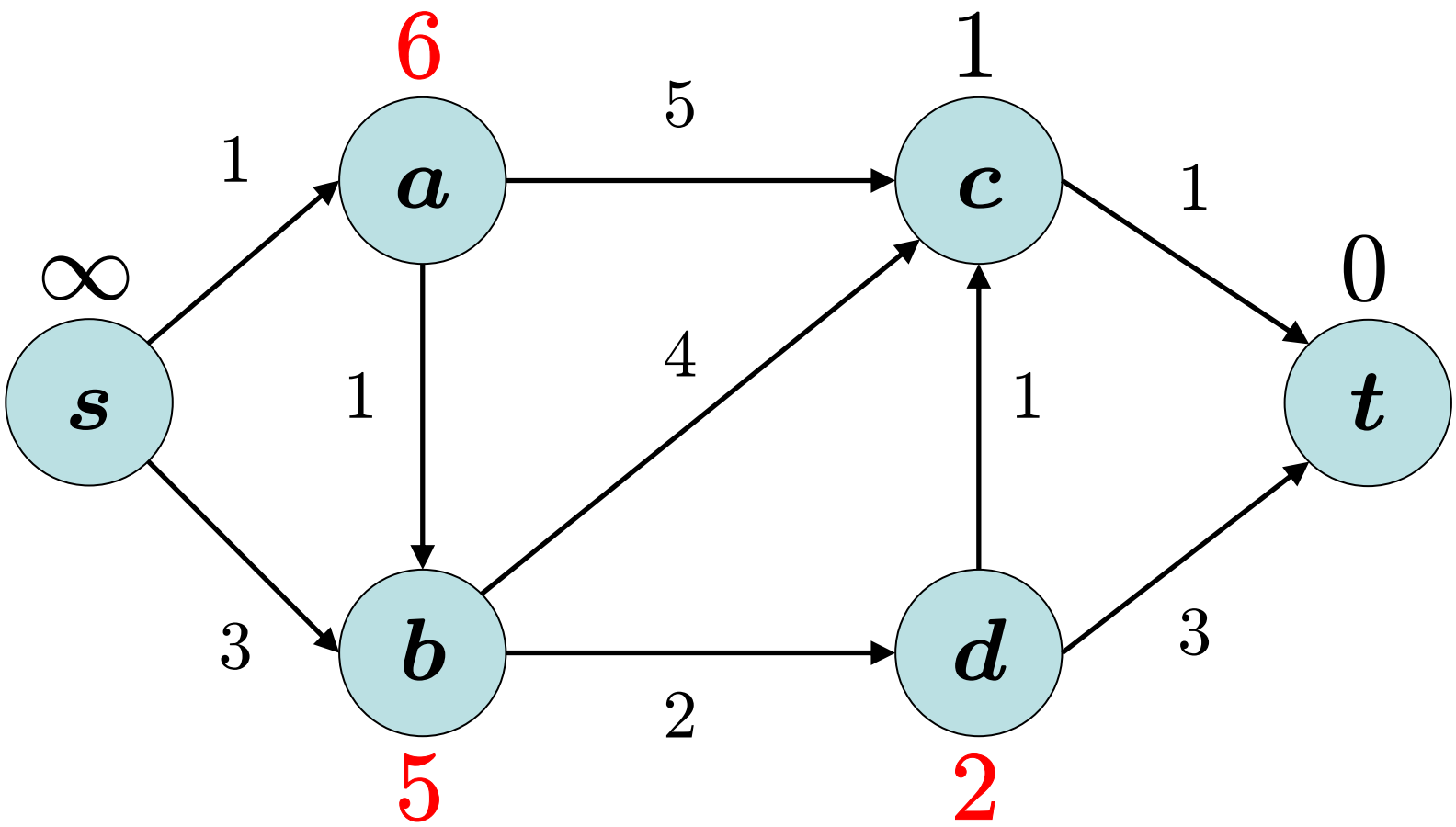
AsynchDP: iteration 1



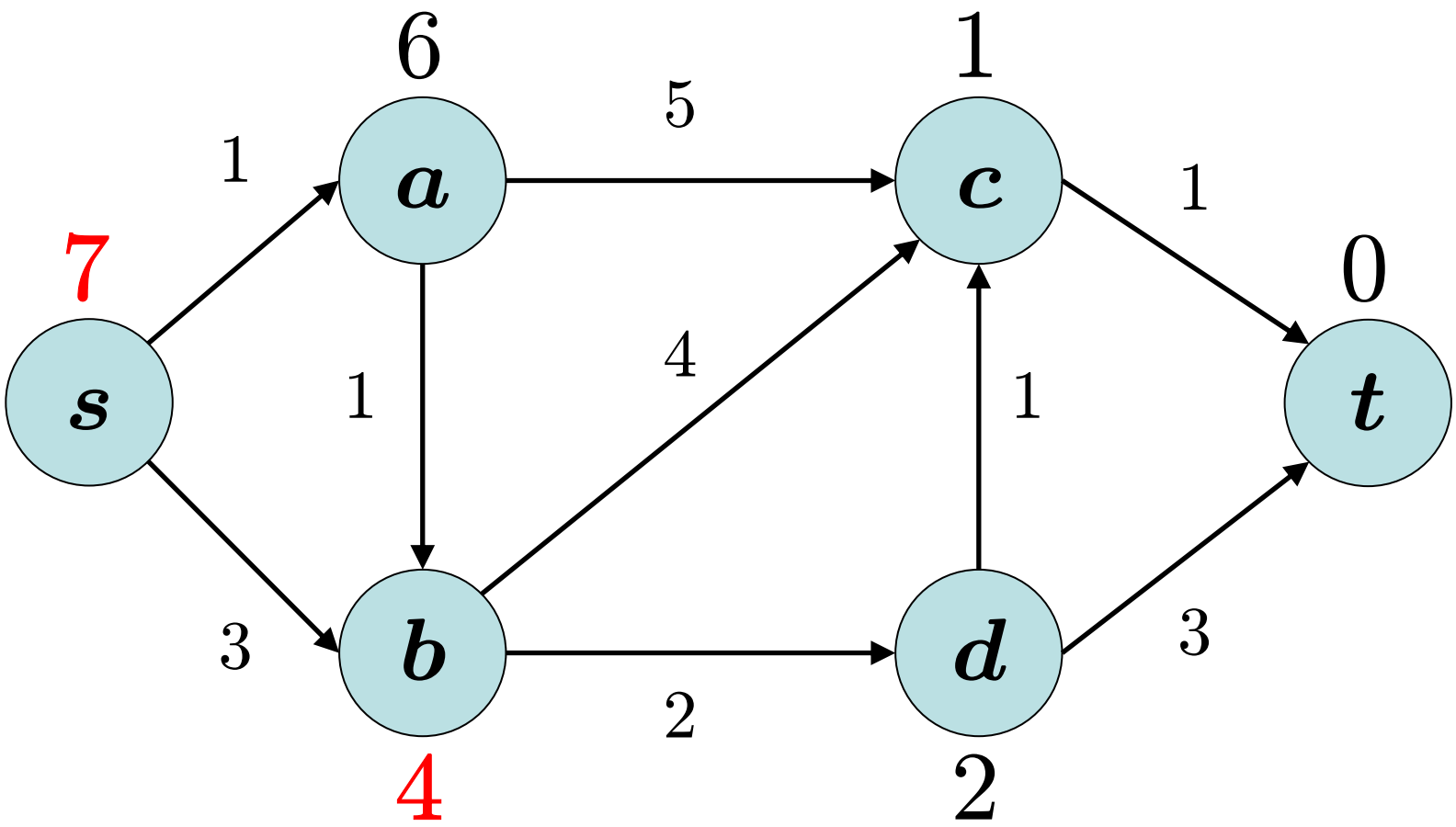
AsynchDP: iteration 2



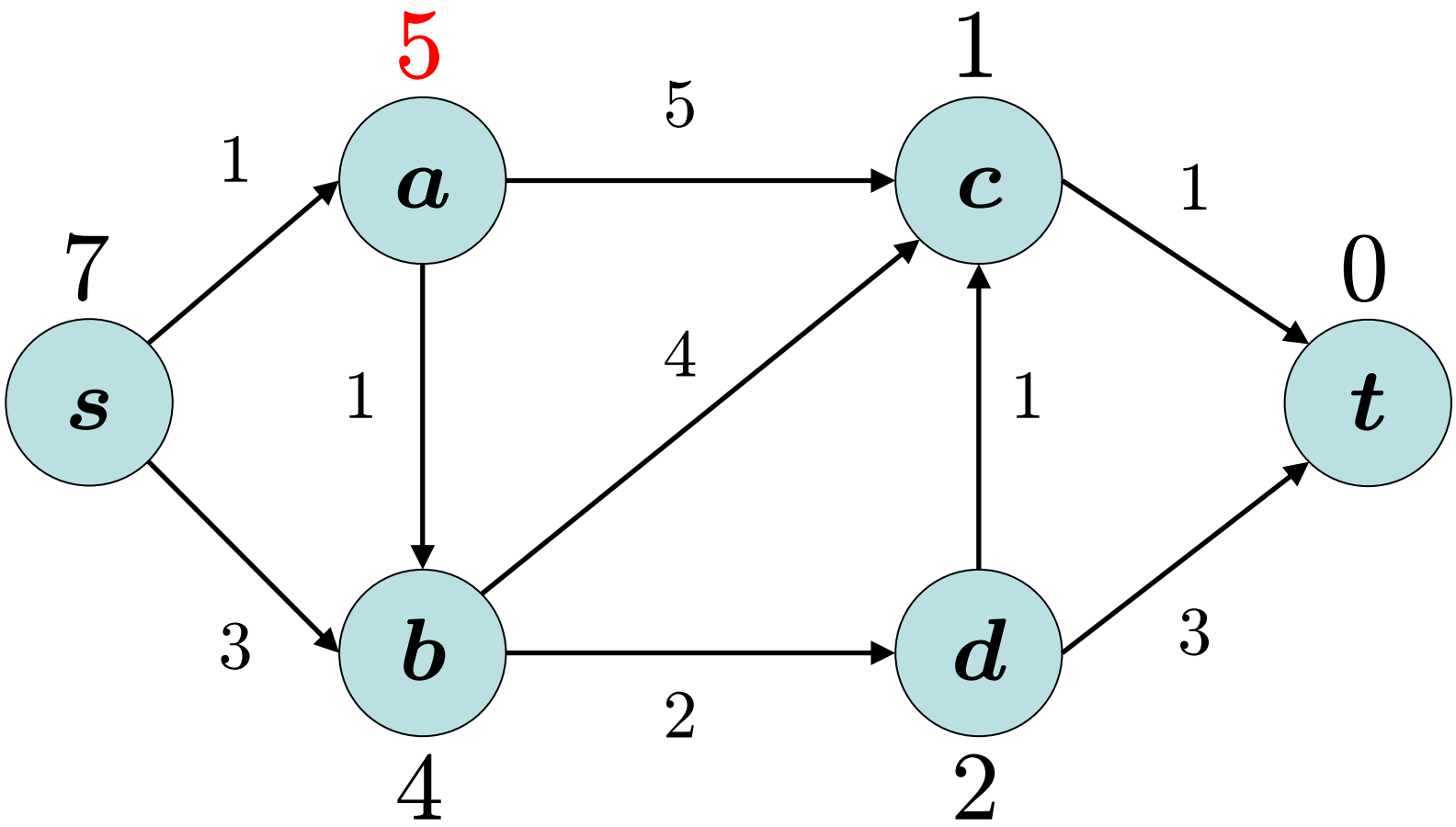
AsynchDP: iteration 3



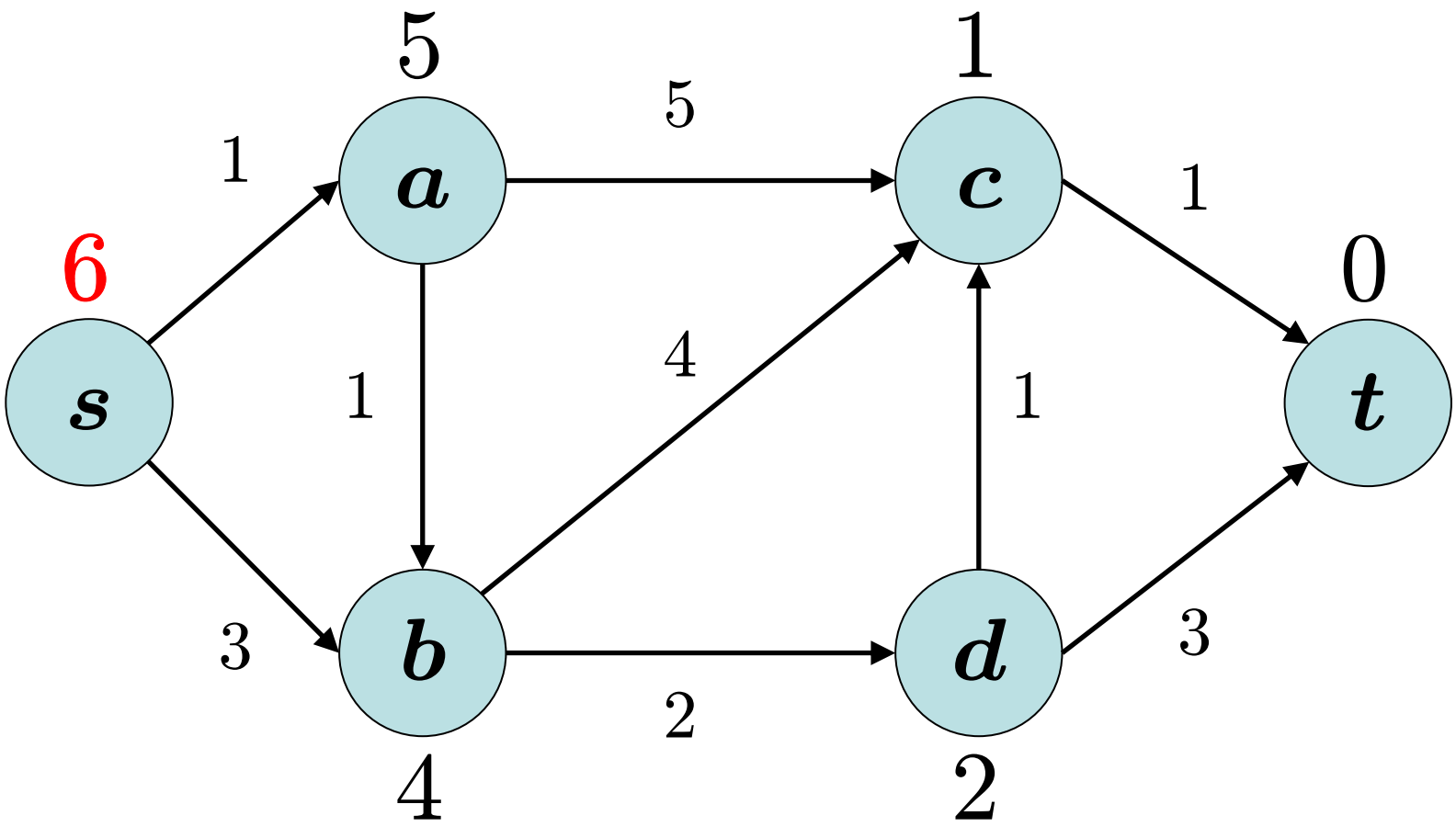
AsynchDP: iteration 4



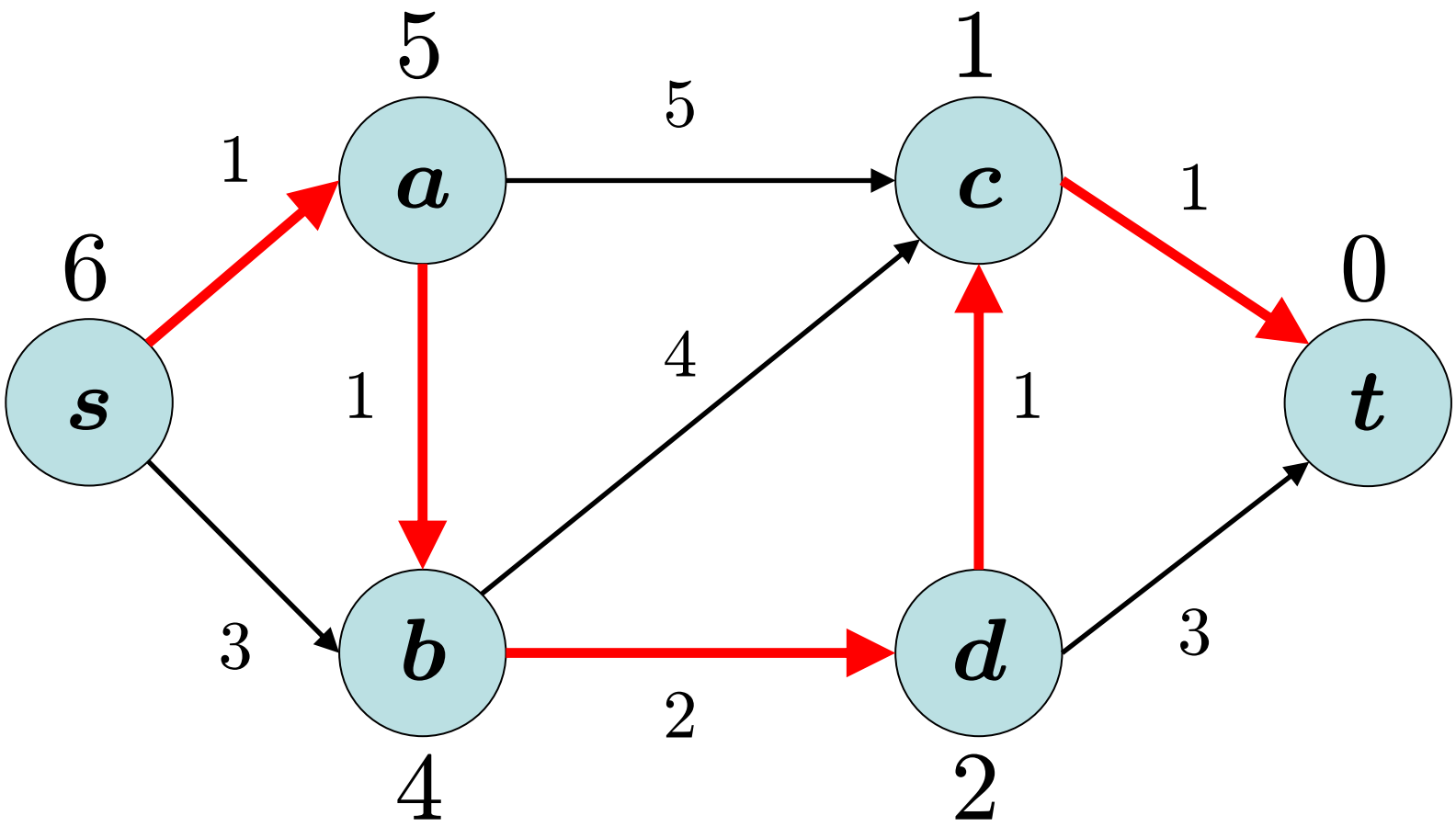
AsynchDP: iteration 5



AsynchDP: iteration 6

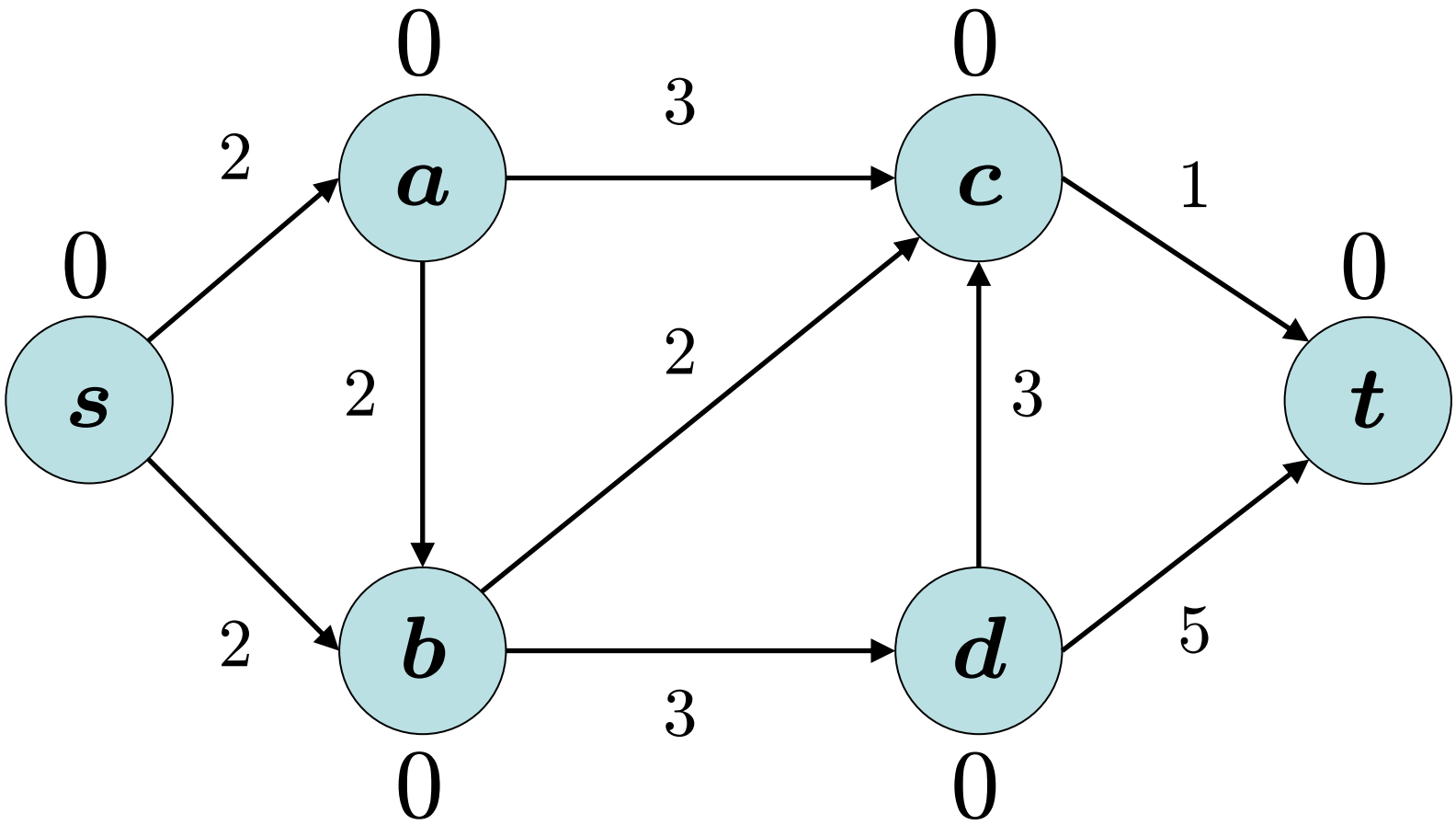


AsynchDP: shortest path

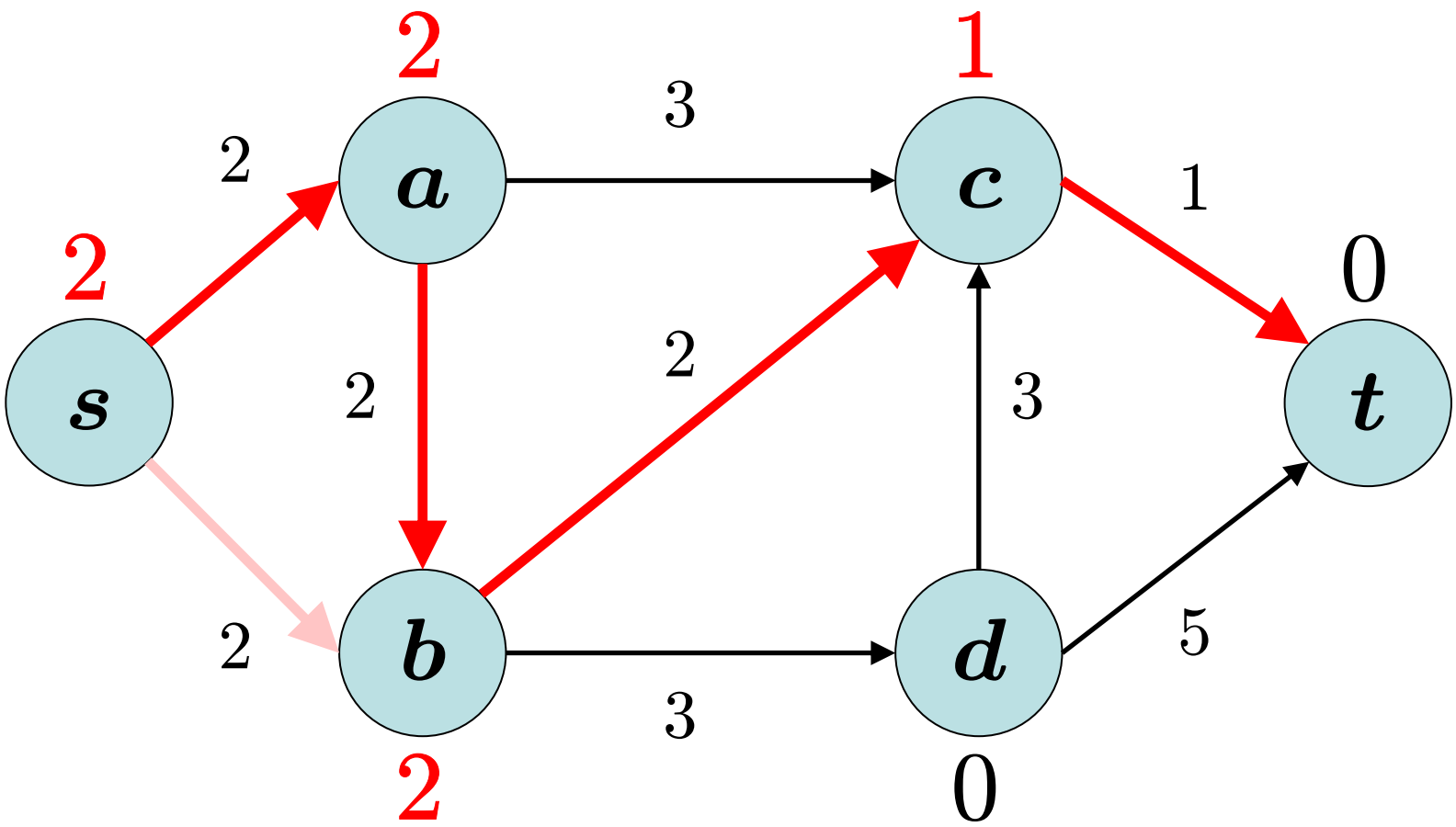


LRTA* Example

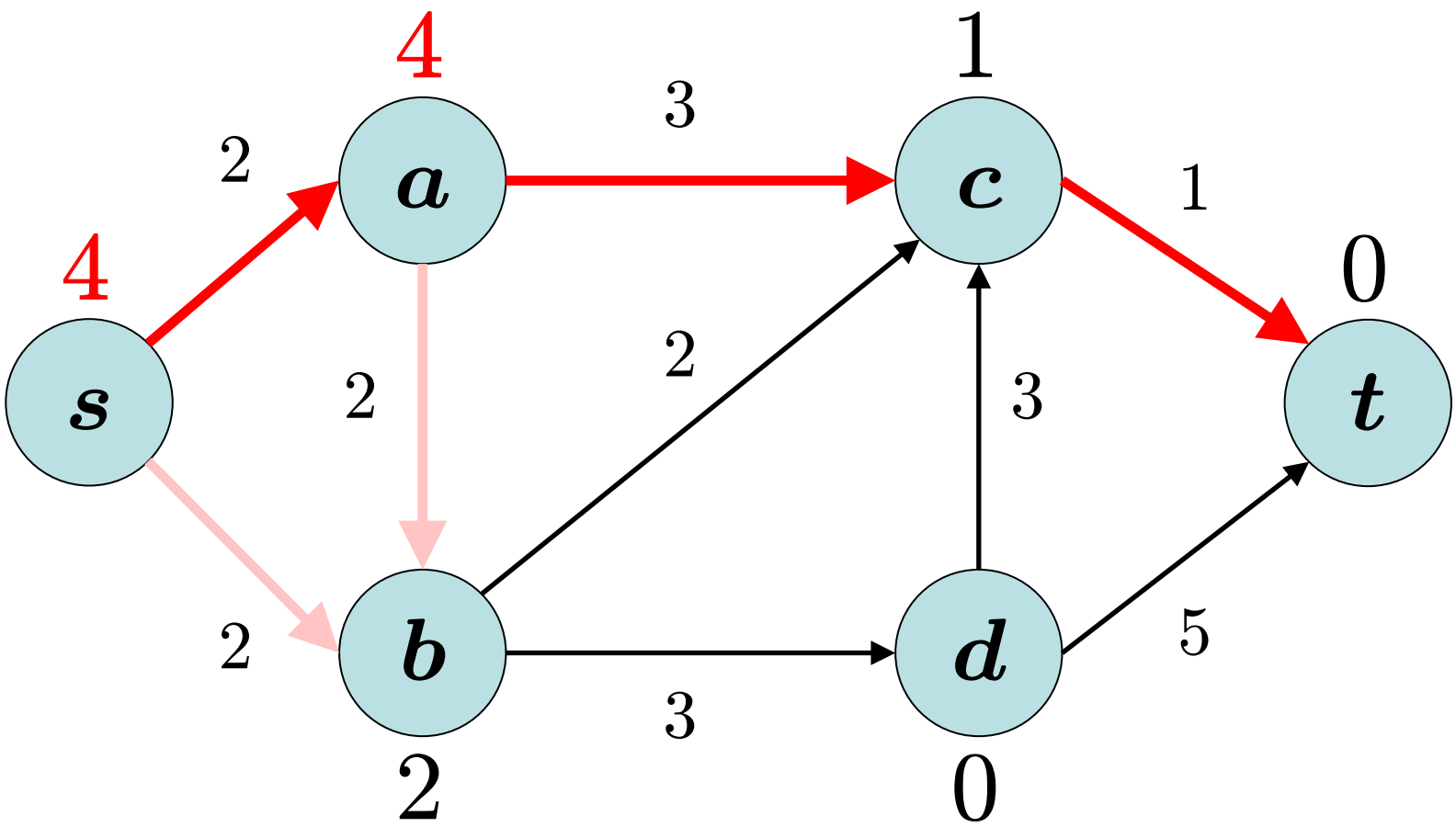
LRTA* - initialization



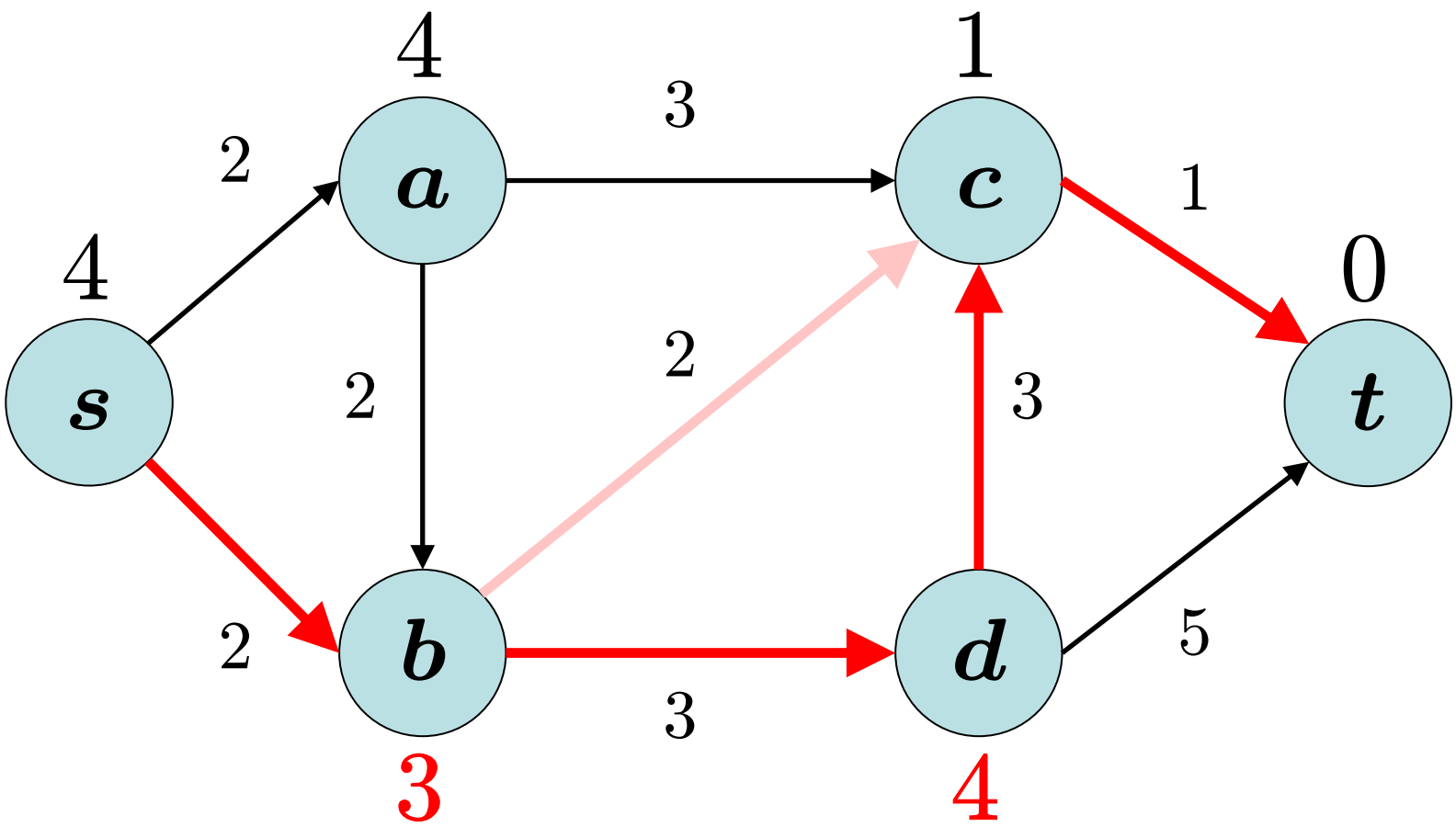
LRTA* - trial 1



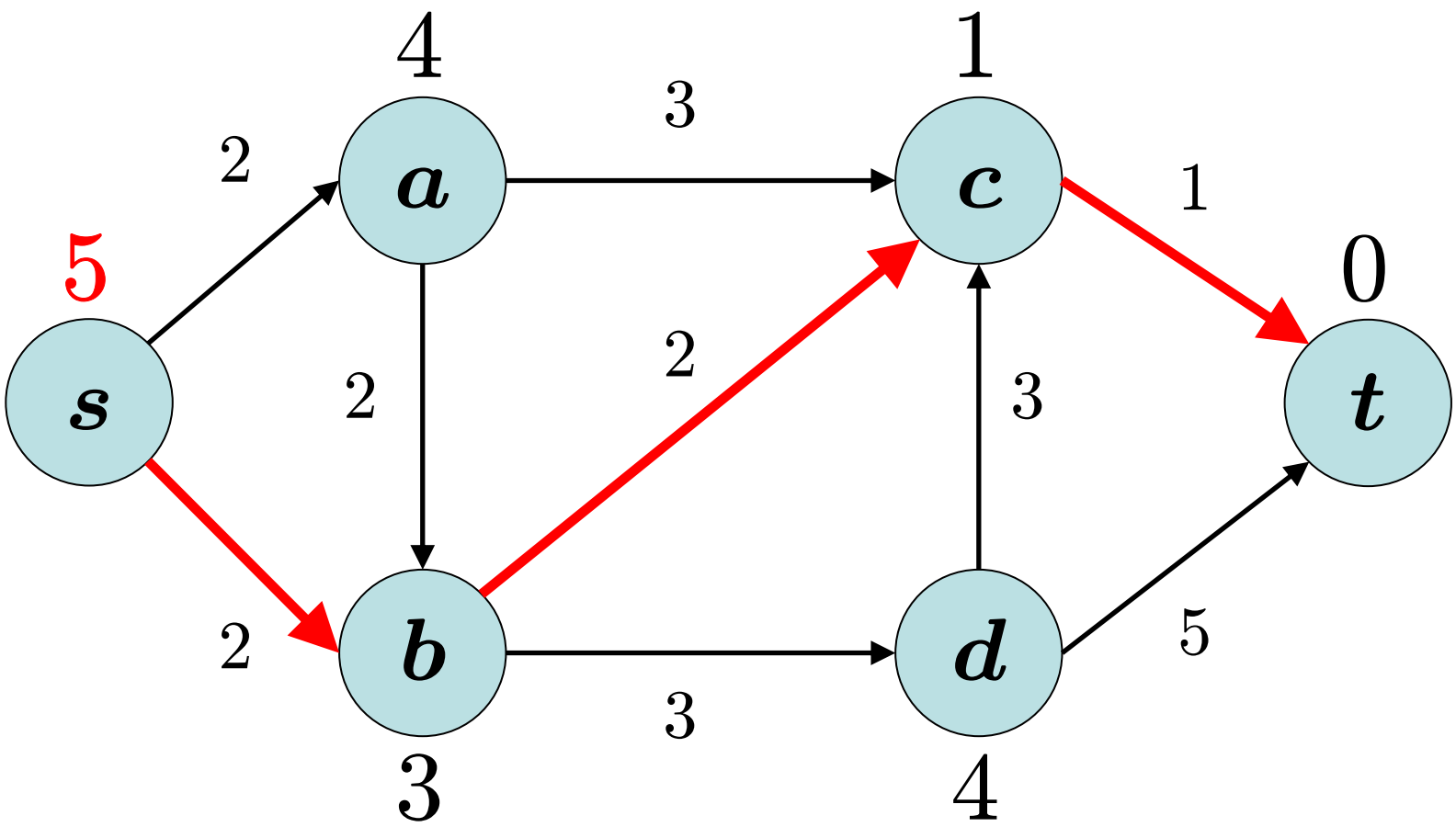
LRTA* - trial 2



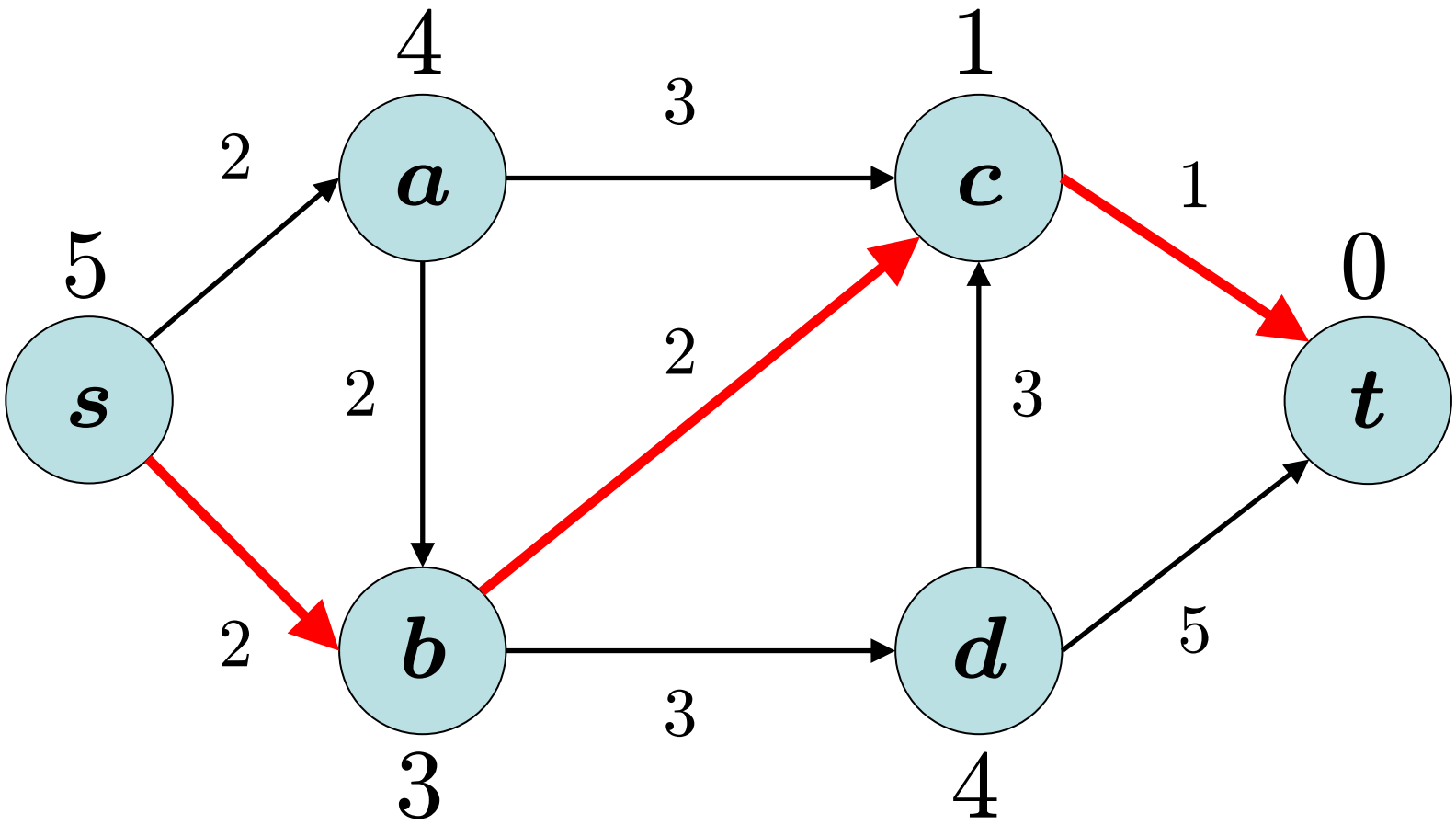
LRTA* - trial 3



LRTA* - trial 4

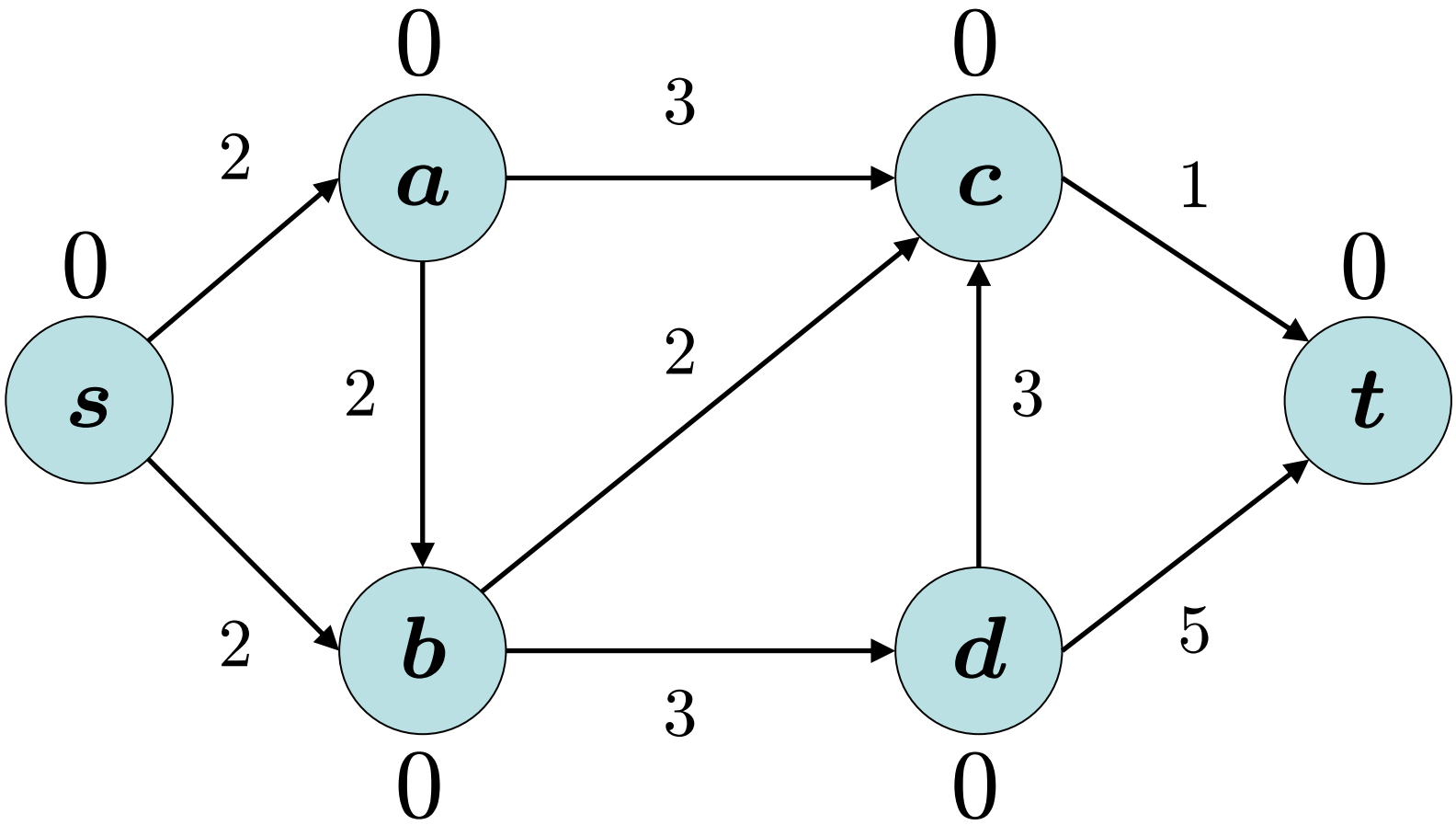


LRTA* - trial 5

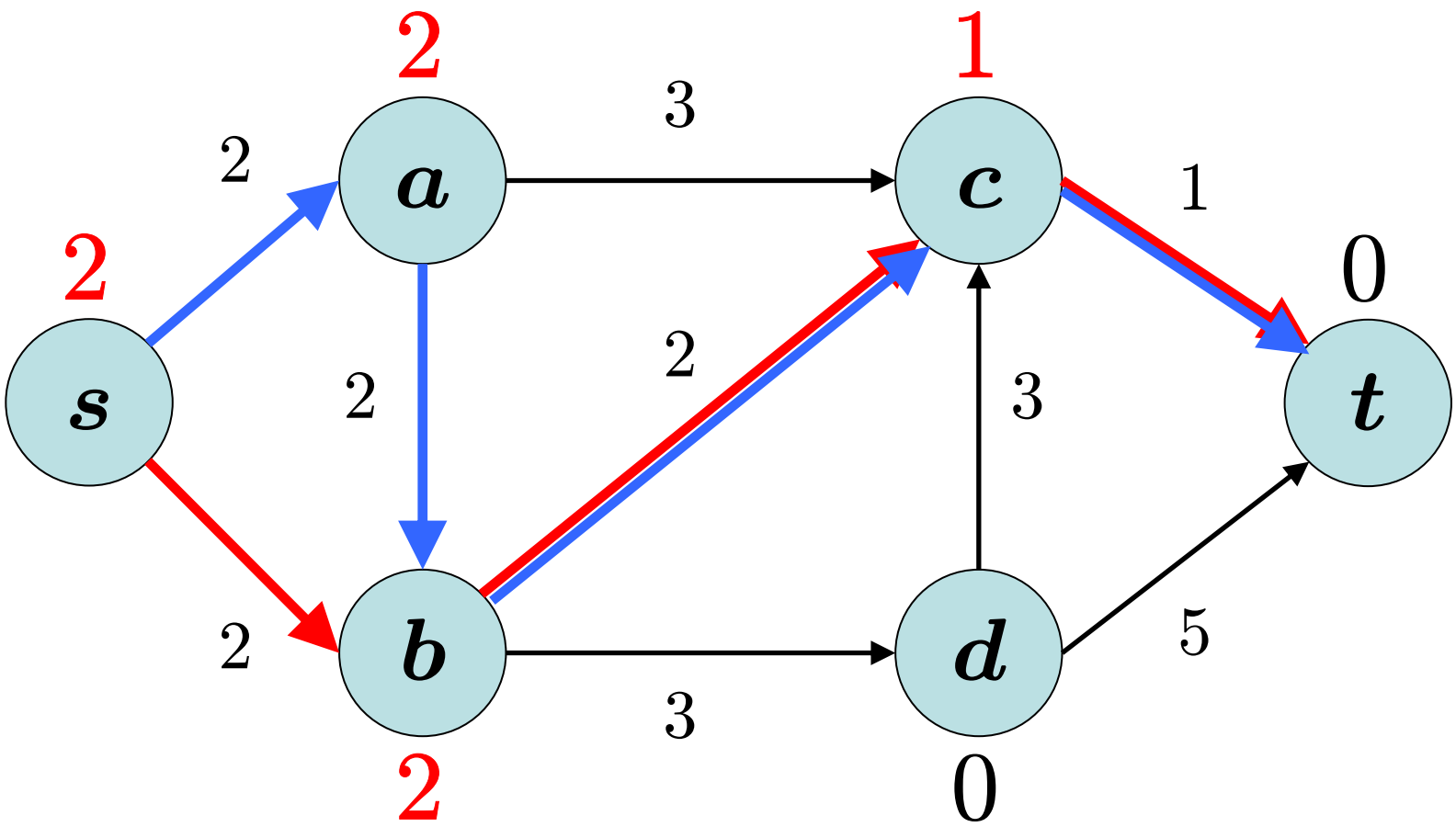


LRTA*(2) Example

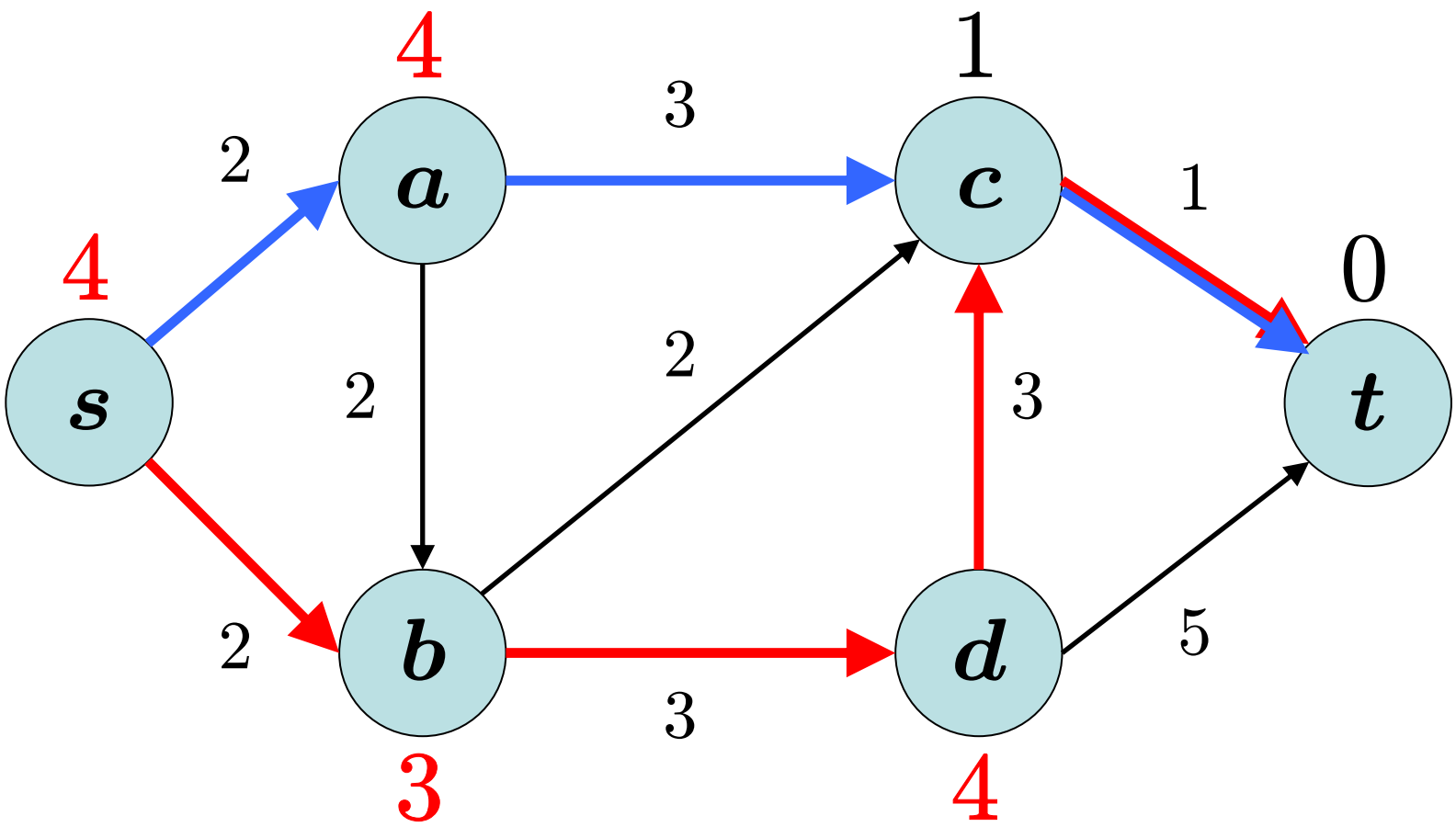
LRTA*(2) - initialization



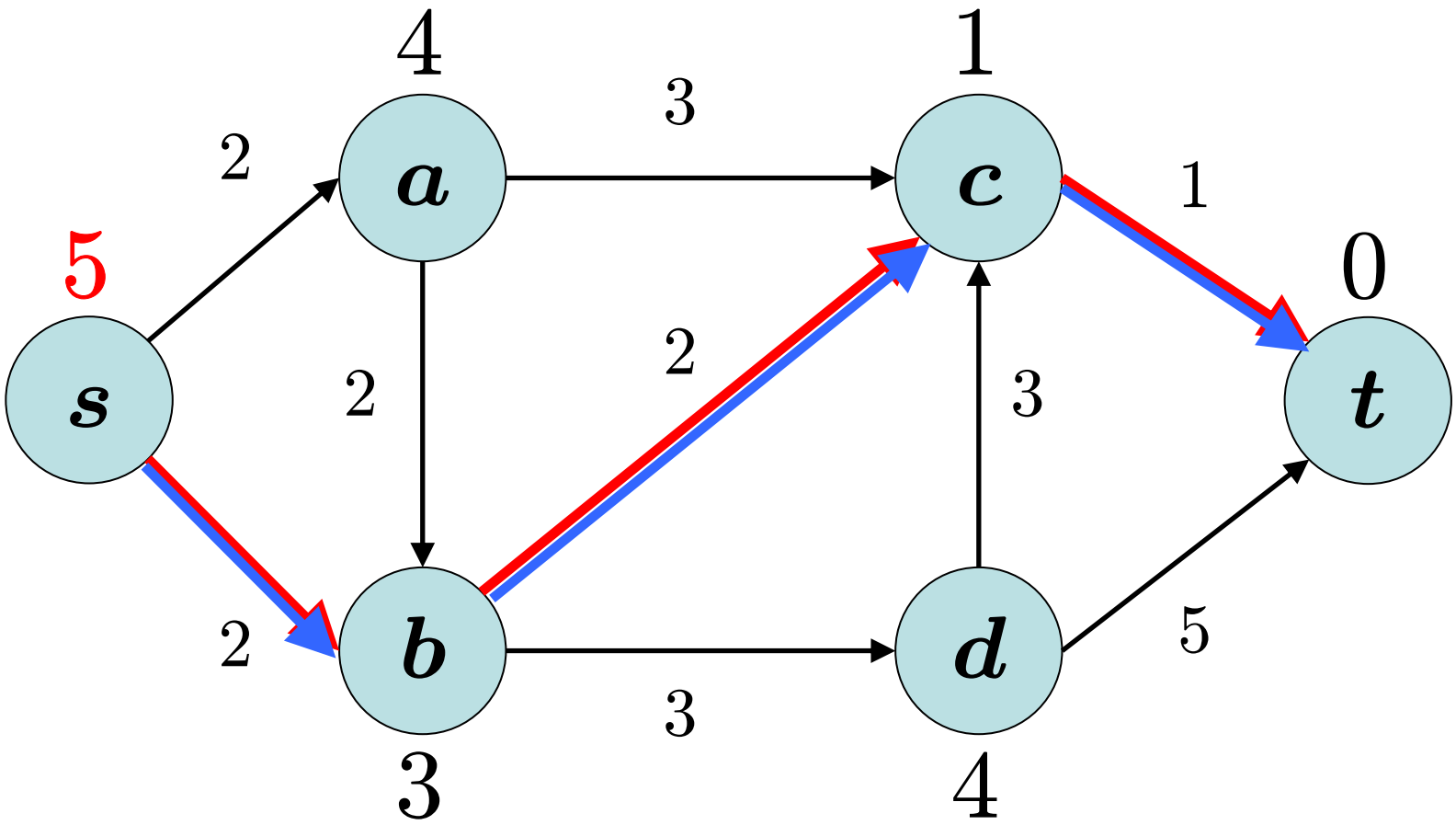
LRTA*(2) – trial 1



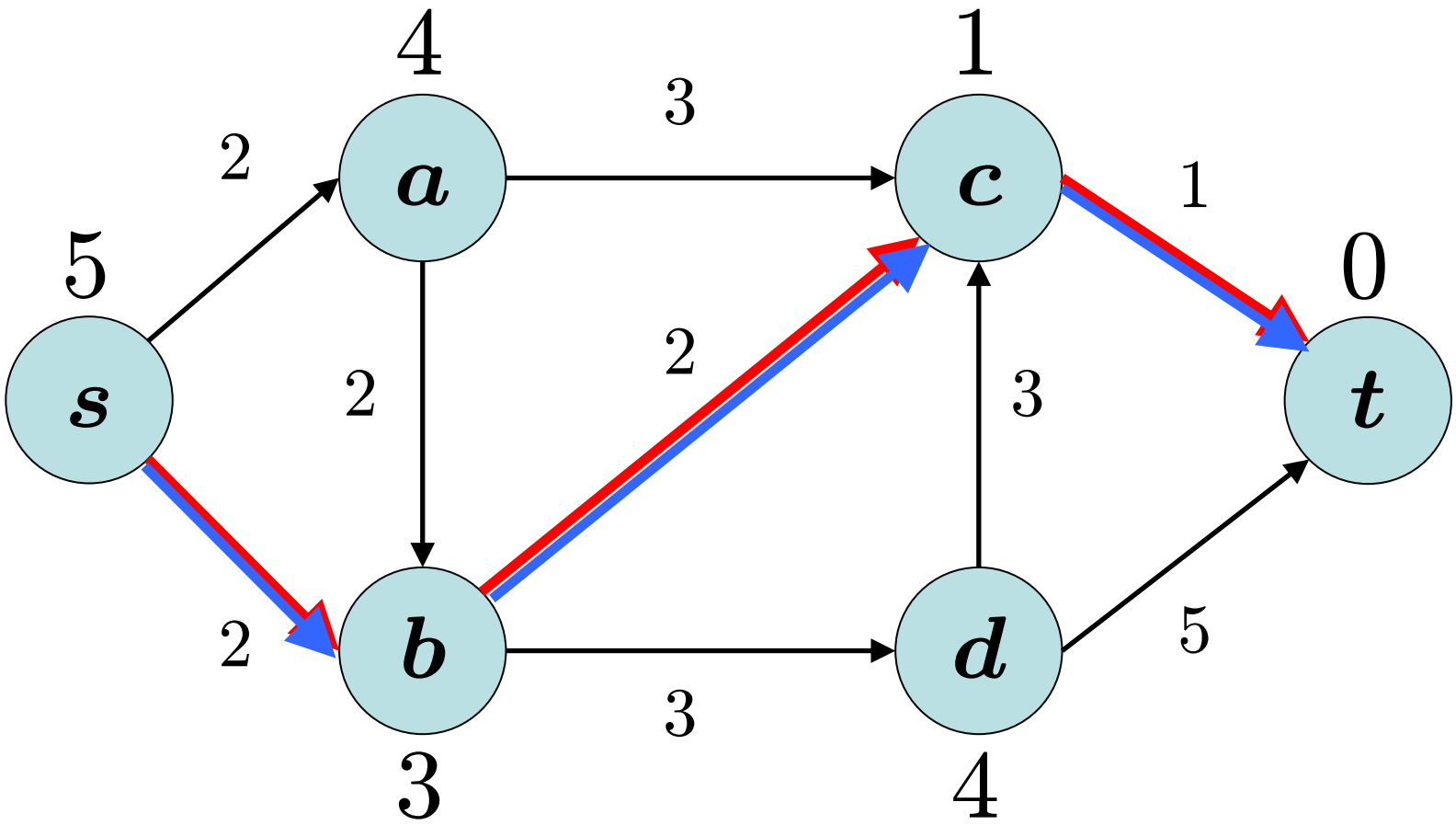
LRTA*(2) – trial 2



LRTA*(2) – trial 3



LRTA*(2) – trial 4



Naive Assignment problem example #1

Naive algorithm

	x_1	x_2	x_3
1	2	4	0
2	1	5	0
3	1	3	2

round	p_1	p_2	p_3	bidder	preferred object	bid incr.	current assignment
0	0	0	0	1	x_2	2	$(1,x_2)$
1	0	2	0	2	x_2	2	$(2,x_2)$
2	0	4	0	3	x_3	1	$(2,x_2)$, $(3,x_3)$
3	0	4	1	1	x_1	2	$(1,x_1)$, $(2,x_2)$, $(3,x_3)$

Naive Assignment Problem example #2

	x_1	x_2	x_3
1	1	1	0
2	1	1	0
3	1	1	0

round	p_1	p_2	p_3	bidder	preferred object	bid incr.	current assignment
0	0	0	0	1	x_1	0	$(1,x_1)$
1	0	0	0	2	x_2	0	$(1,x_1)$, $(2,x_2)$
2	0	0	0	3	x_1	0	$(3,x_1)$, $(2,x_2)$
3	0	0	0	1	x_2	0	$(3,x_1)$, $(1,x_2)$
4	0	0	0	2	x_1	0	$(2,x_1)$, $(1,x_2)$

Improved Assignment Problem example #3

	x_1	x_2	x_3
1	1	1	0
2	1	1	0
3	1	1	0

round	p_1	p_2	p_3	bidder	preferred object	bid incr.	current assignment
0	ε	0	0	1	x_1	ε	$(1,x_1)$
1	ε	2ε	0	2	x_2	2ε	$(1,x_1)$, $(2,x_2)$
2	3ε	2ε	0	3	x_1	2ε	$(3,x_1)$, $(2,x_2)$
3	3ε	4ε	0	1	x_2	2ε	$(3,x_1)$, $(1,x_2)$
4	5ε	4ε	0	2	x_1	2ε	$(2,x_1)$, $(1,x_2)$