



P2P Networks – Exercise # 6

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Date: Nov. 29th, 2011



Announcement

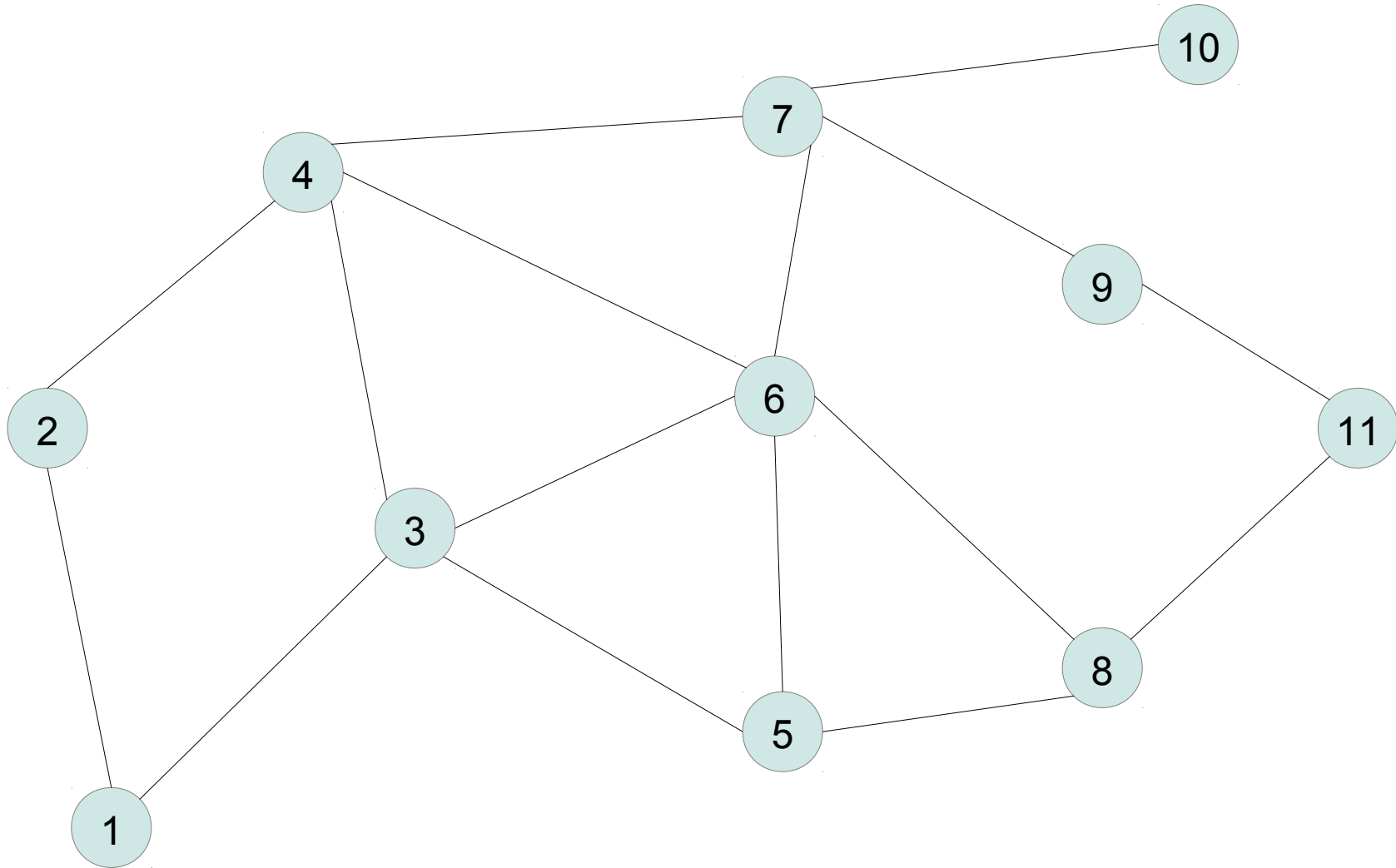
On 24. 01. 2012

Exercise Class from 13:30 to 15:00

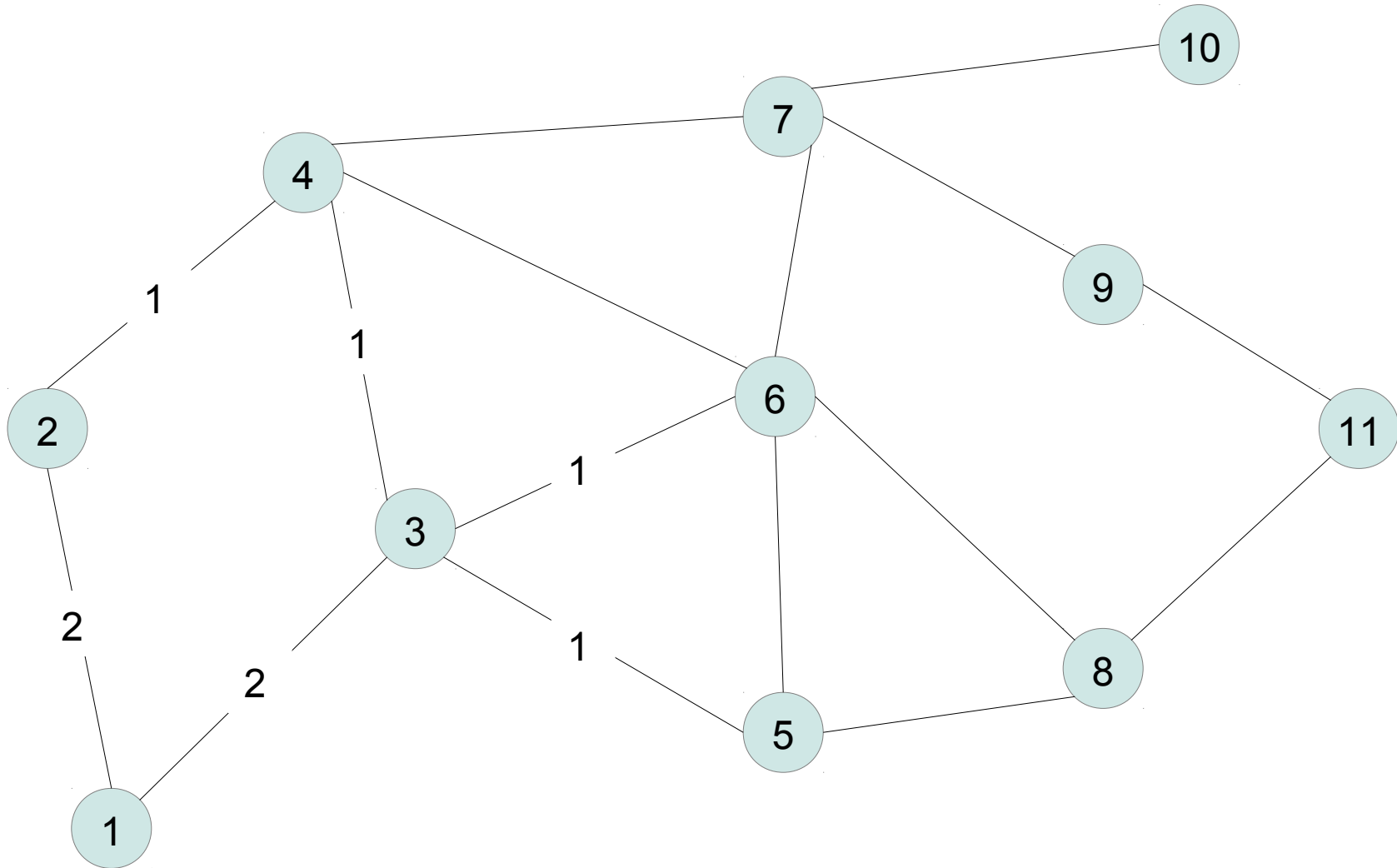


Gnutella

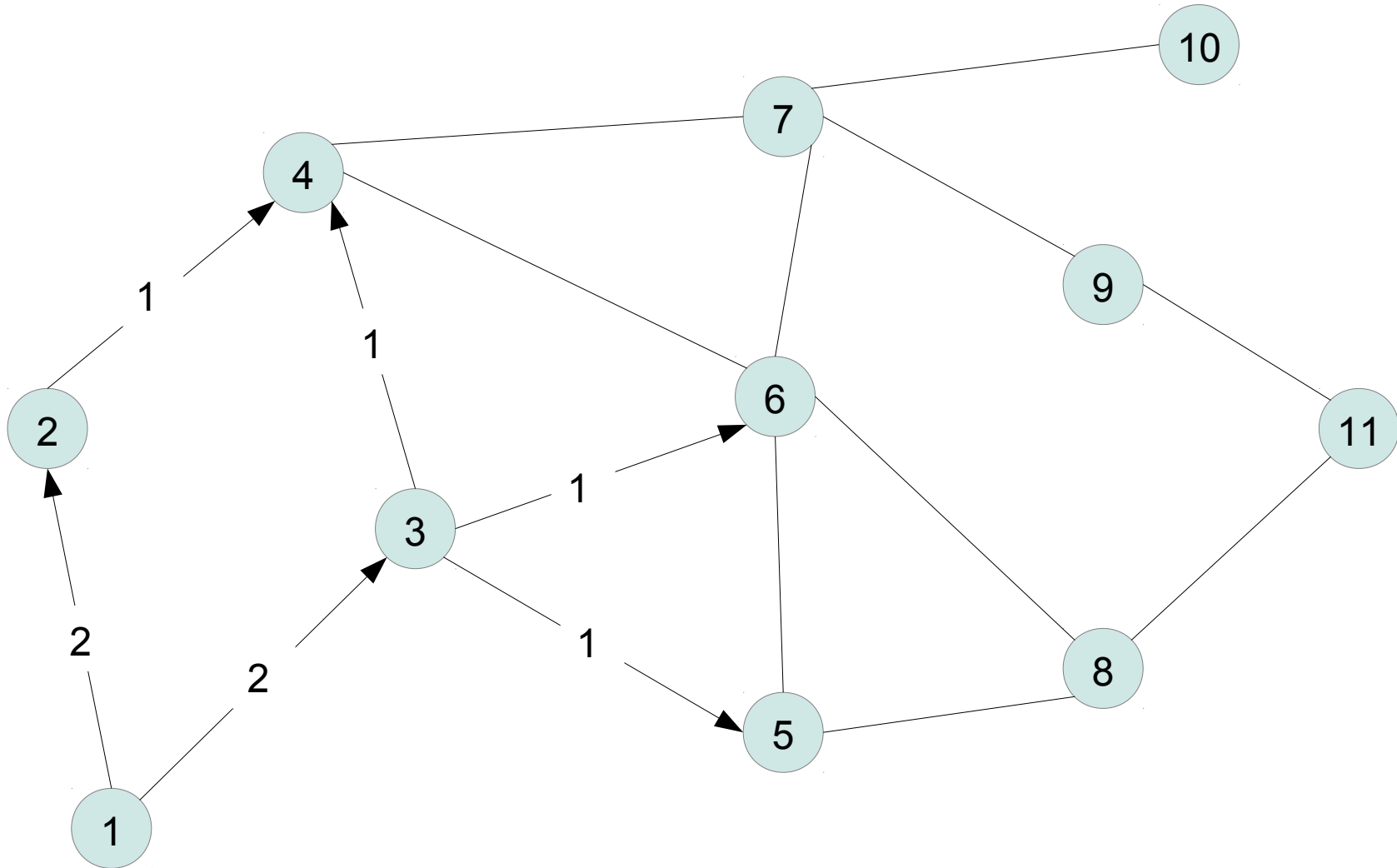
1.1) QUERY Routing



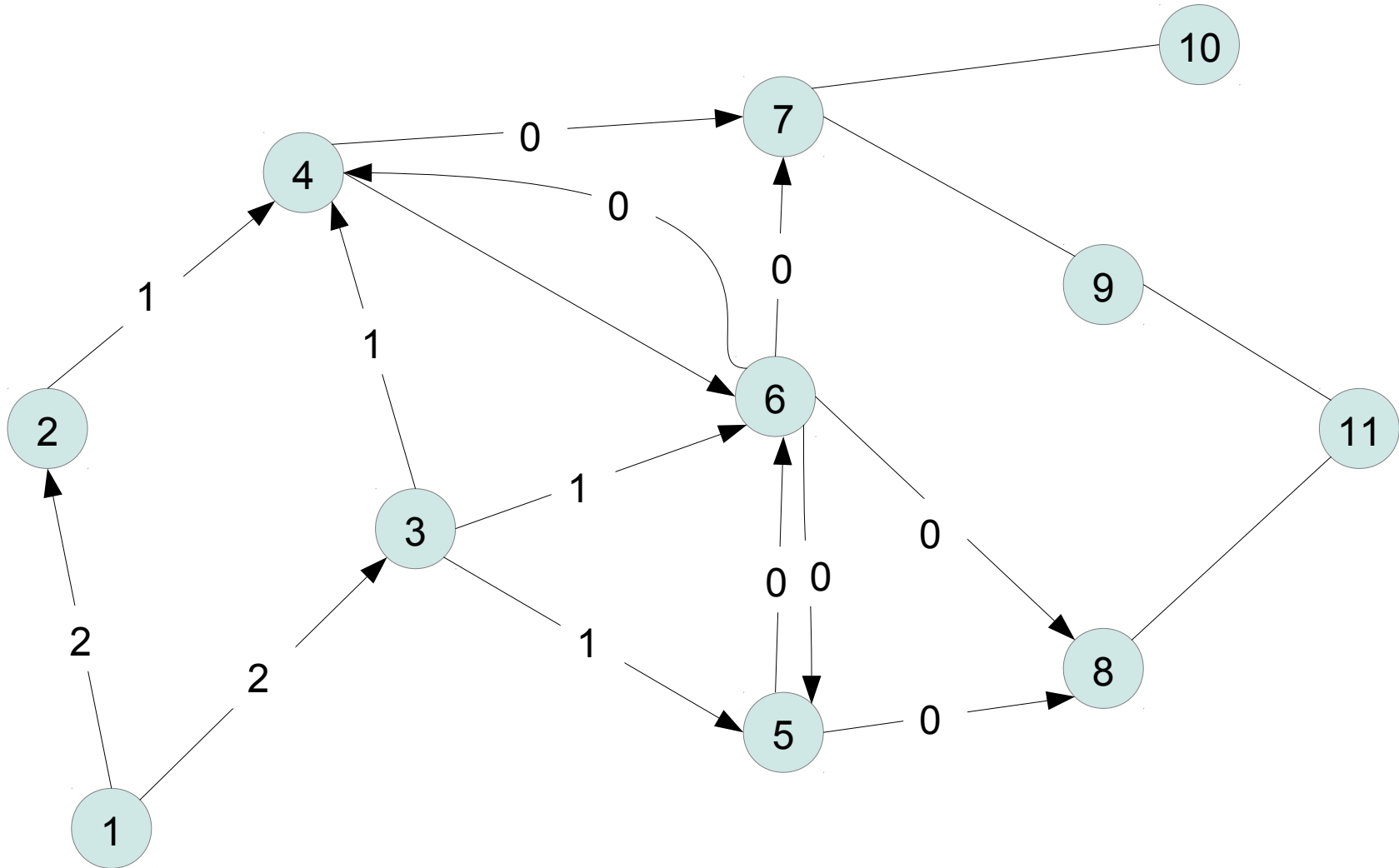
1.1) QUERY Routing



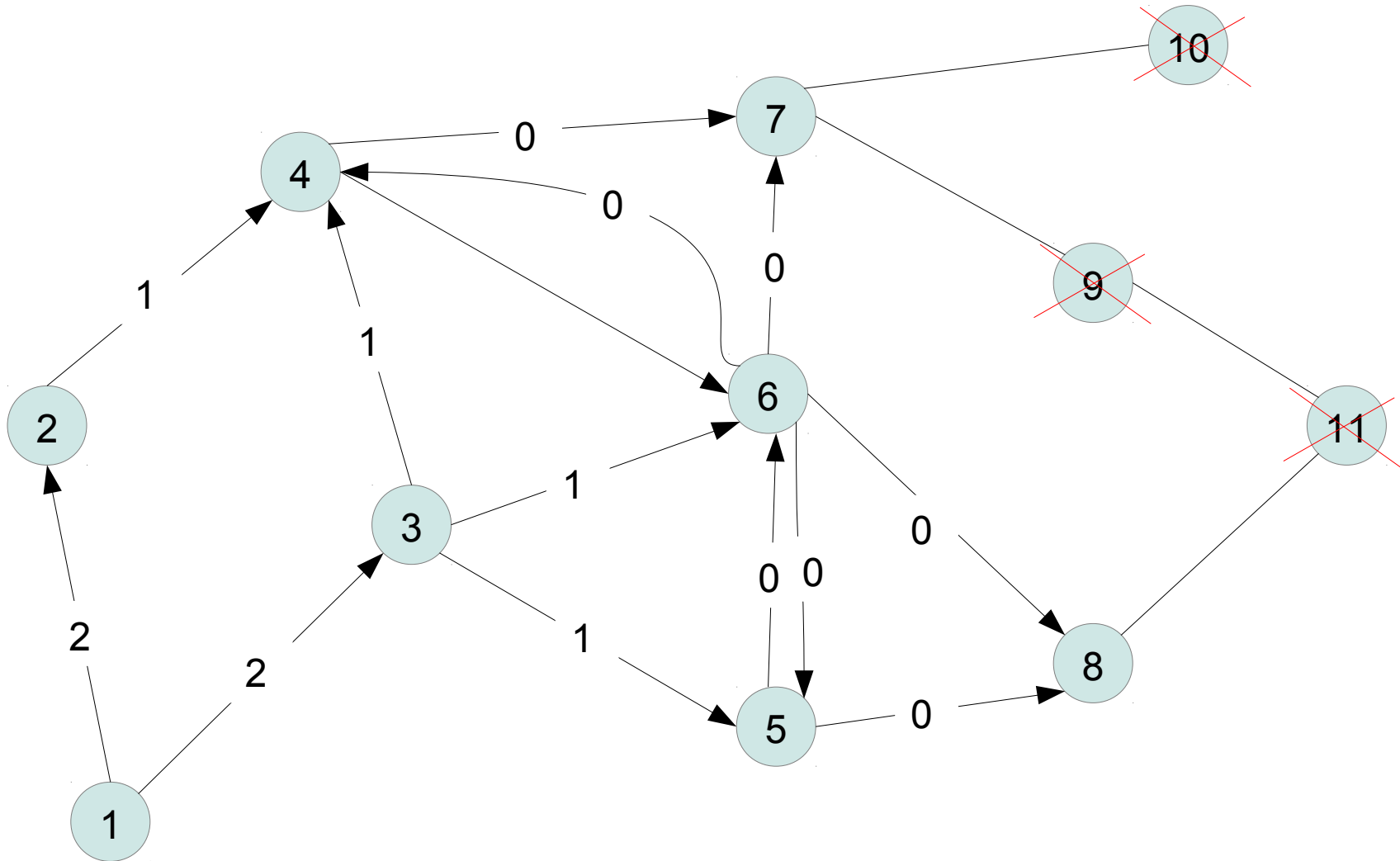
1.1) QUERY Routing



1.1) QUERY Routing

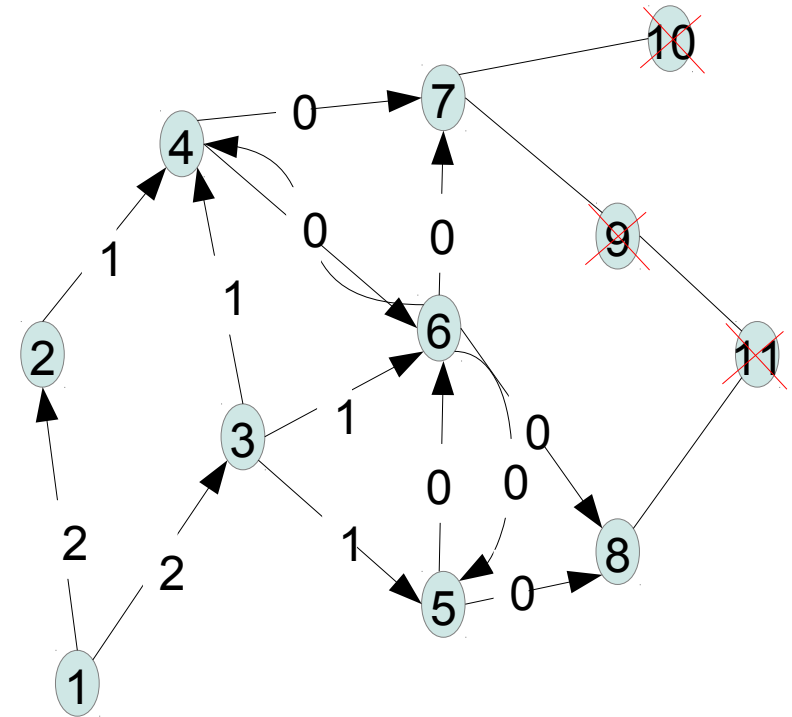


1.1) QUERY Routing



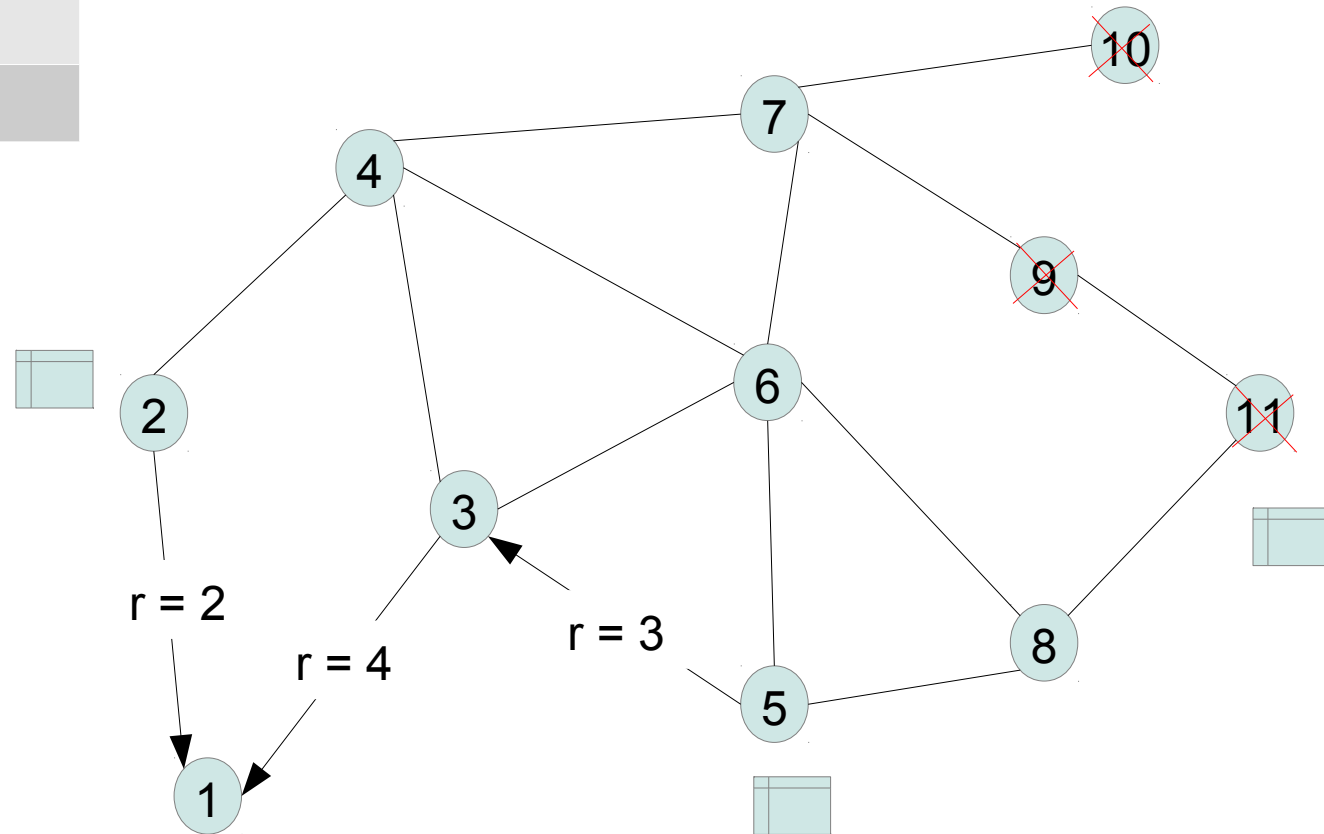
1.1) QUERY Routing

Round	Sender	Receiver	TTL
1	1	2	2
	1	3	2
	1	4	2
2	2	4	1
	3	4	1
	3	5	1
	3	6	1
	3	7	1
	3	8	1
3	4	7	0
	4	6	0
	5	6	0
	5	8	0
	6	4	0
	6	8	0



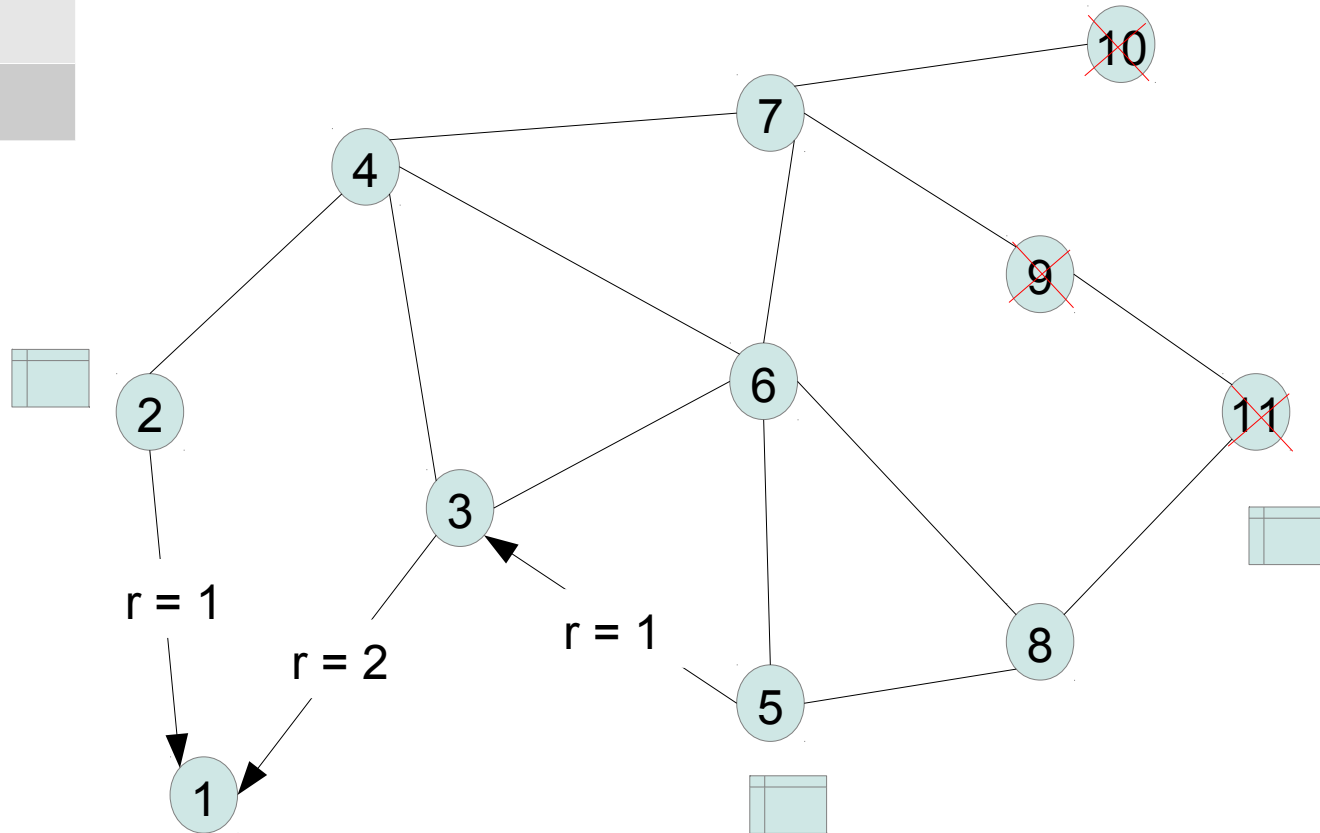
1.2) QUERYHIT Routing - V1

Round	Sender	Receiver
2	2	1
3	5	3
4	3	1



1.2) QUERYHIT Routing - V2

Round	Sender	Receiver
1	2	1
	5	3
2	3	1

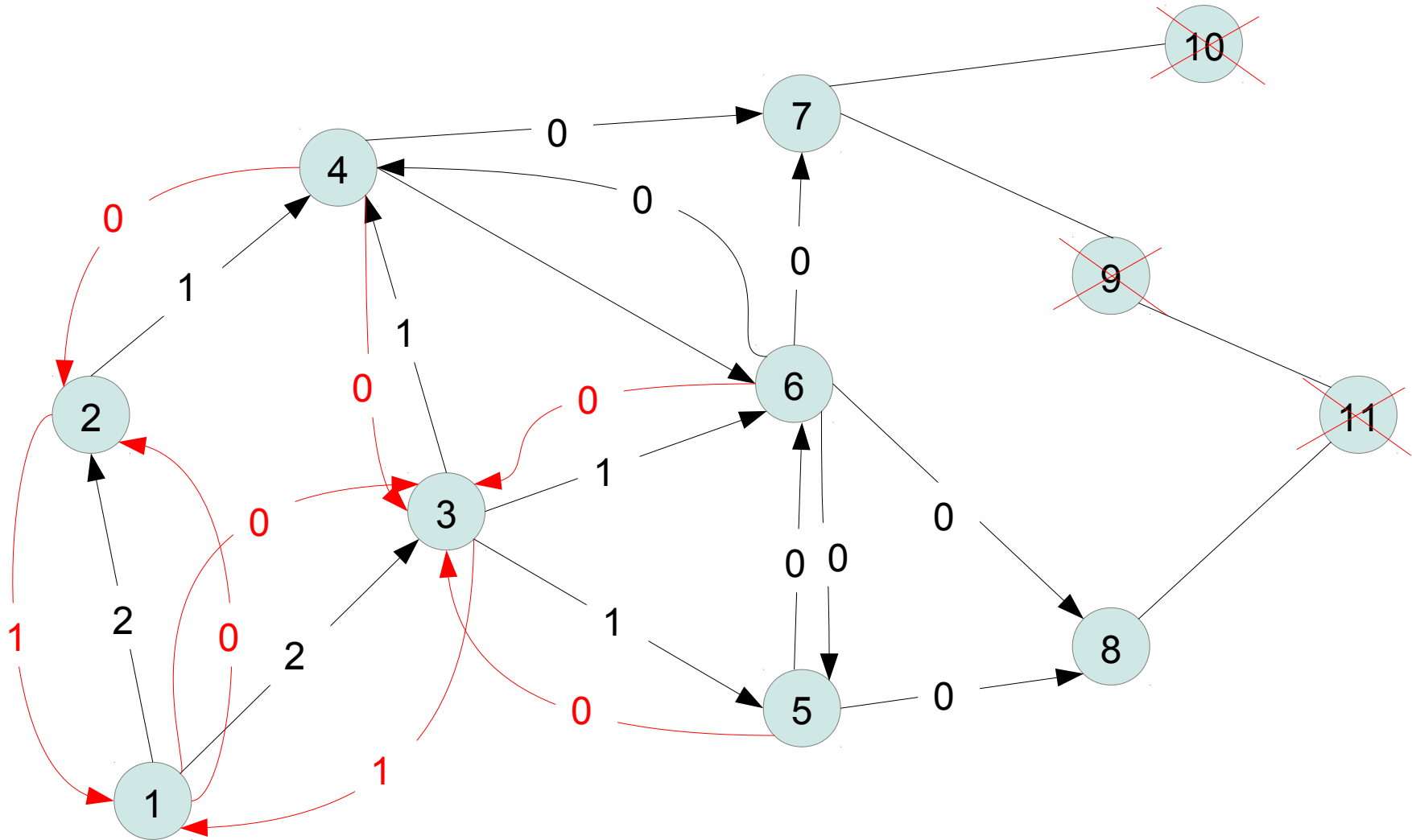




1.3) State Information (1/2)

- Forward the same QUERY again
 - Even own QUERY messages
- Forward QUERY message to sender
- Messages could run in class
 - Until TTL expires
- Flooding of QUERYHIT necessary
 - Piggybacking
- Resent QUERY messages if QUERY copy received

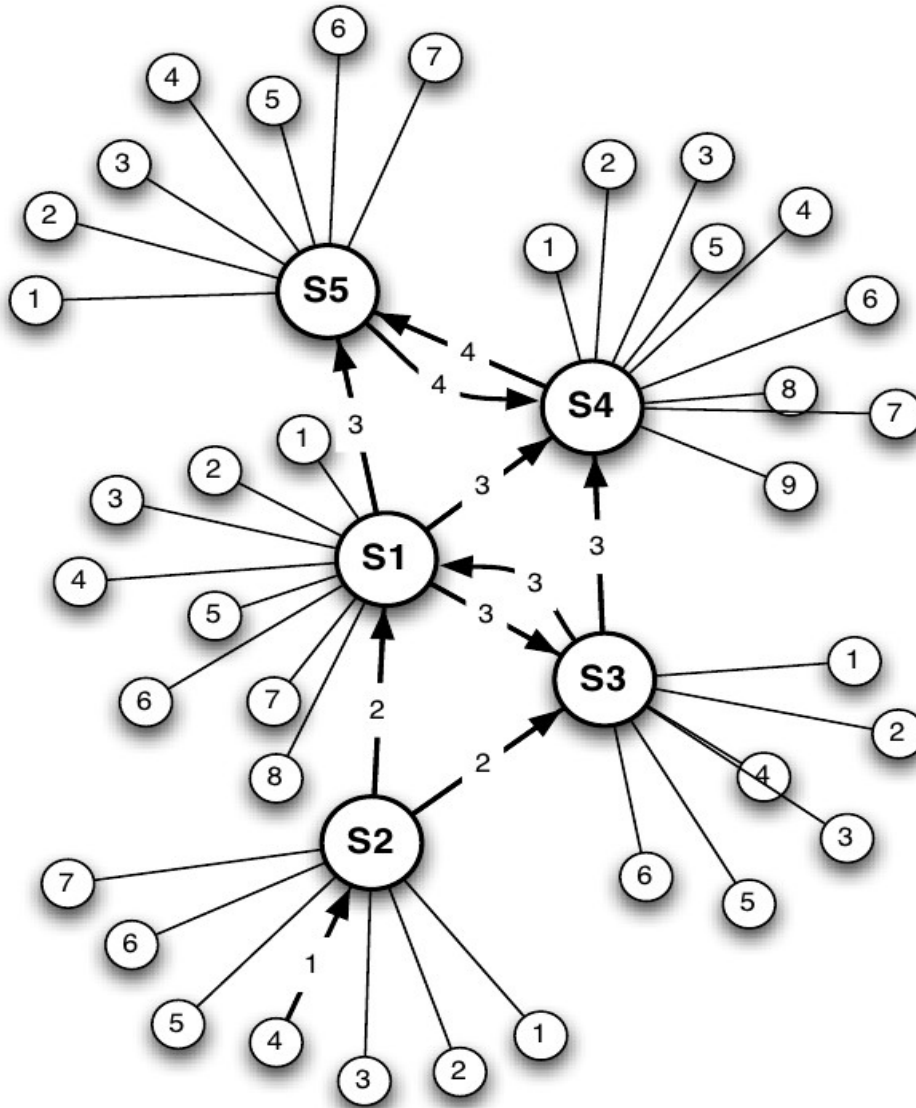
1.3) State Information (2/2)





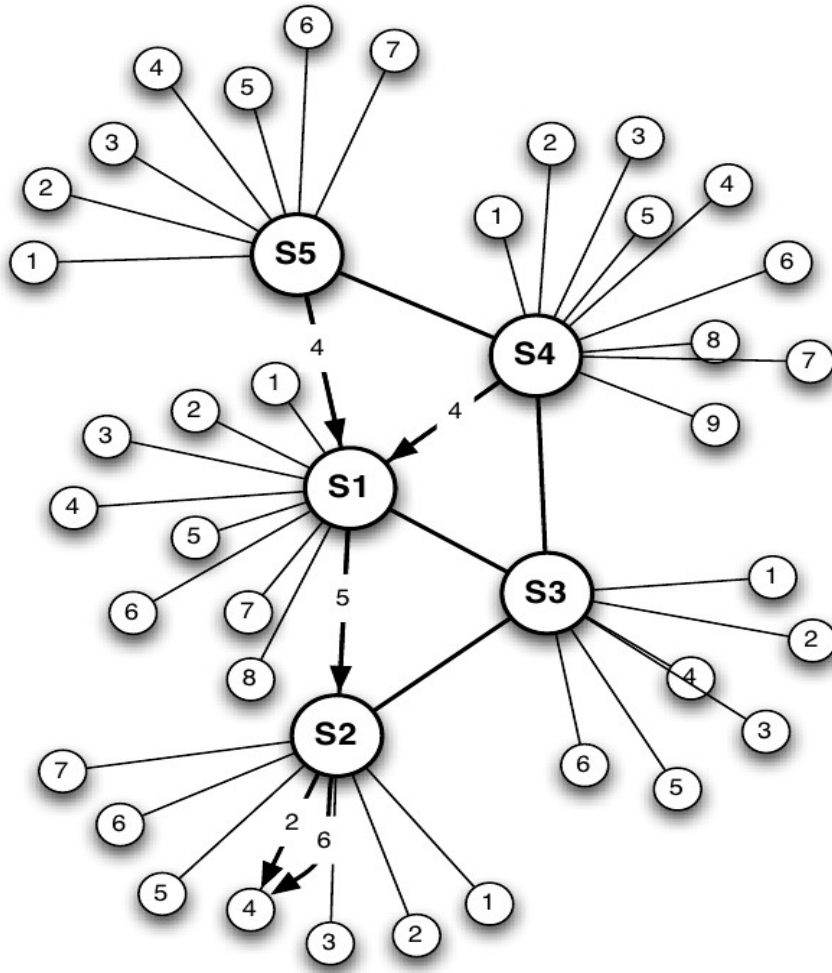
KaZaA

2.1) QUERY Routing



Round	Sender	Receiver
1	S2.4	S2
2	S2	S1
	S2	S3
3	S1	S3
	S1	S4
	S1	S5
	S3	S1
	S3	S4
4	S4	S5
	S5	S4

2.2) Result Routing - V1



Round	Sender	Receiver
2	S2	S2.4
4	S4	S1
	S5	S1
5	S1	S2
6	S2	S2.4

Round	Sender	Receiver
2	S2	S2.4
4	S4	S1
	S5	S1
5	S1	S2
	S3	S2
6	S2	S2.4

2.2) Result Routing – 2.2

Round	Sender	Receiver
2	S2	S2.4
4	S4	S1
	S5	S1
5	S1	S2
6	S2	S2.4



Round	Sender	Receiver
1	S2	S2.4
	S4	S1
	S5	S1
2	S1	S2
3	S2	S2.4

Round	Sender	Receiver
2	S2	S2.4
4	S4	S1
	S5	S1
5	S1	S2
	S3	S2
6	S2	S2.4



Round	Sender	Receiver
1	S2	S2.4
	S4	S1
	S5	S1
2	S1	S2
	S3	S2
3	S2	S2.4



Next Exercise

- Due date 07.12.2011
- 14:25 - 16.05
- S2|02 - C110