

COMPUTER NETWORKS

OSPF

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28-04-2023

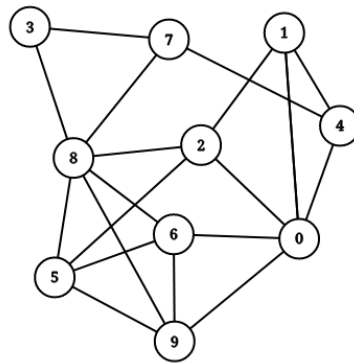
REPORT - OSPF

The purpose of this lab is to implement a simplified version of the Open Shortest Path First (OSPF) routing protocol.

TOPOLOGY

Graph - 1

Graph of the first topology is as follows:



Routing Tables for Graph - 1

Routing Table for Node No. 0 at Time 10

Dest	Path	Cost
1	0-1	35
2	0-2	17
3	0-6-8-7-3	149
4	0-1-4	57
5	0-6-5	80

Dest	Path	Cost
6	0-6	16
7	0-6-8-7	75
8	0-6-8	61
9	0-9	76

Routing Table for Node No. 1 at Time 10

Dest	Path	Cost
0	1-0	32
2	1-0-2	50
3	1-0-2-8-7-3	186
4	1-4	30
5	1-0-2-5	122
6	1-0-6	73
7	1-0-2-8-7	112
8	1-0-2-8	98
9	1-0-9	99

Routing Table for Node No. 2 at Time 10

Dest	Path	Cost
0	2-0	10
1	2-0-1	50
3	2-8-7-3	135
4	2-0-4	54
5	2-5	80
6	2-0-6	51
7	2-8-7	61

Dest	Path	Cost
8	2-8	47
9	2-0-9	77

Routing Table for Node No. 3 at Time 10

Dest	Path	Cost
0	3-7-8-2-0	108
1	3-7-8-2-0-1	148
2	3-7-8-2	86
4	3-7-8-2-0-4	152
5	3-7-8-5	95
6	3-7-8-6	115
7	3-7	25
8	3-7-8	38
9	3-7-8-2-0-9	175

Routing Table for Node No. 4 at Time 10

Dest	Path	Cost
0	4-0	20
1	4-1	23
2	4-0-2	38
3	4-0-2-8-7-3	174
5	4-0-2-5	110
6	4-0-6	61
7	4-0-2-8-7	100
8	4-0-2-8	86

Dest	Path	Cost
9	4-0-9	87

Routing Table for Node No. 5 at Time 10

Dest	Path	Cost
0	5-2-0	64
1	5-2-0-1	104
2	5-2	42
3	5-8-7-3	98
4	5-2-0-4	108
6	5-6	70
7	5-8-7	24
8	5-8	10
9	5-9	104

Routing Table for Node No. 6 at Time 10

Dest	Path	Cost
0	6-0	62
1	6-0-1	102
2	6-0-2	80
3	6-8-7-3	138
4	6-0-4	106
5	6-5	64
7	6-8-7	64
8	6-8	50
9	6-9	76

Routing Table for Node No. 7 at Time 10

Dest	Path	Cost
0	7-8-2-0	87
1	7-8-2-0-1	127
2	7-8-2	65
3	7-3	63
4	7-8-2-0-4	131
5	7-8-5	74
6	7-8-6	94
8	7-8	17
9	7-8-2-0-9	154

Routing Table for Node No. 8 at Time 10

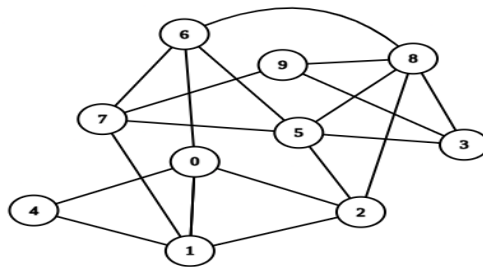
Dest	Path	Cost
0	8-2-0	63
1	8-2-0-1	103
2	8-2	41
3	8-7-3	92
4	8-2-0-4	107
5	8-5	15
6	8-6	76
7	8-7	18
9	8-2-0-9	130

Routing Table for Node No. 9 at Time 10

Dest	Path	Cost
0	9-0	63
1	9-0-1	103
2	9-0-2	81
3	9-6-8-7-3	213
4	9-0-4	107
5	9-6-5	144
6	9-6	80
7	9-6-8-7	139
8	9-6-8	125

Graph 2

Graph of the second topology is as follows:



Routing Tables for Graph 2

Routing Table for Node No. 0 at Time 10

Dest	Path	Cost
1	0-1	40
2	0-2	20
3	0-2-8-3	183
4	0-4	40
5	0-2-5	97
6	0-6	41
7	0-2-8-7	107
8	0-2-8	96
9	0-1-9	106

Routing Table for Node No. 1 at Time 10

Dest	Path	Cost
0	1-0	46
2	1-0-2	66
3	1-0-2-8-3	229
4	1-4	28
5	1-0-2-5	143
6	1-0-6	87
7	1-0-2-8-7	153
8	1-0-2-8	142
9	1-9	90

Routing Table for Node No. 2 at Time 10

Dest	Path	Cost
0	2-0	21
1	2-0-1	61

Dest	Path	Cost
3	2-8-3	128
4	2-0-4	61
5	2-5	57
6	2-0-6	62
7	2-8-7	52
8	2-8	41
9	2-0-1-9	127

Routing Table for Node No. 3 at Time 10

Dest	Path	Cost
0	3-7-8-2-0	86
1	3-7-8-2-0-1	126
2	3-7-8-2	75
4	3-7-8-2-0-4	126
5	3-7-8-5	87
6	3-7-8-6	126
7	3-7	38
8	3-7-8	49
9	3-7-8-2-0-1-9	192

Routing Table for Node No. 4 at Time 10

Dest	Path	Cost
0	4-0	28
1	4-1	30
2	4-0-2	48
3	4-0-2-8-3	211

Dest	Path	Cost
5	4-0-2-5	125
6	4-0-6	69
7	4-0-2-8-7	135
8	4-0-2-8	124
9	4-1-9	96

Routing Table for Node No. 5 at Time 10

Dest	Path	Cost
0	5-8-2-0	66
1	5-8-2-0-1	106
2	5-8-2	55
3	5-3	103
4	5-8-2-0-4	106
6	5-6	60
7	5-8-7	40
8	5-8	29
9	5-6-9	134

Routing Table for Node No. 6 at Time 10

Dest	Path	Cost
0	6-0	72
1	6-0-1	112
2	6-8-2	86
3	6-8-3	147
4	6-0-4	112
5	6-5	66

Dest	Path	Cost
7	6-8-7	71
8	6-8	60
9	6-9	80

Routing Table for Node No. 7 at Time 10

Dest	Path	Cost
0	7-8-2-0	53
1	7-8-2-0-1	93
2	7-8-2	42
3	7-3	31
4	7-8-2-0-4	93
5	7-8-5	54
6	7-8-6	93
8	7-8	16
9	7-8-2-0-1-9	159

Routing Table for Node No. 8 at Time 10

Dest	Path	Cost
0	8-5-2-0	98
1	8-5-2-0-1	138
2	8-5-2	87
3	8-3	85
4	8-5-2-0-4	138
5	8-5	10
6	8-5-6	74
7	8-7	10

Dest	Path	Cost
9	8-5-9	142

Routing Table for Node No. 9 at Time 10

Dest	Path	Cost
0	9-6-0	110
1	9-1	87
2	9-6-0-2	130
3	9-6-8-3	249
4	9-1-4	113
5	9-6-5	140
6	9-6	74
7	9-6-8-7	173
8	9-6-8	162