

Python 2.7.12 |Anaconda 4.2.0 (64-bit)| (default, Jun 29 2016, 11:07:13) [MSC v.1500 64 bit (AMD64)]

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IPython 5.1.0 -- An enhanced Interactive Python.

? -> Introduction and overview of IPython's features.

%quickref -> Quick reference.

help -> Python's own help system.

object? -> Details about 'object', use 'object??' for extra details.

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In [1]: runfile('C:/Users/sachi/Documents/kb/Kurskalgo.py', wdir='C:/Users/sachi/Documents/kb')

Minimal Spanning Tree

Source	destination	Distance
2	10	2.00 Km
5	7	5.39 Km
4	5	5.83 Km
2	9	5.83 Km
6	8	5.83 Km
3	9	7.07 Km
7	9	11.18 Km
1	4	11.18 Km
7	8	15.81 Km

MST Weight = 70.12

PATH FROM SRC-DEST LOAD(Kbps) Hops

[1, 4, 5, 7, 9, 2]	60 Kbps	----	5 hops
[1, 4, 5, 7, 9, 3]	120 Kbps	----	5 hops
[1, 4]	90 Kbps	----	1 hops
[1, 4, 5]	45 Kbps	----	2 hops
[1, 4, 5, 7]	60 Kbps	----	3 hops
[1, 4, 5, 7, 9, 2, 10]	75 Kbps	----	6 hops
[2, 9, 3]	90 Kbps	----	2 hops
[2, 9, 7, 5]	45 Kbps	----	3 hops
[2, 9, 7, 8, 6]	105 Kbps	----	4 hops
[2, 9, 7]	60 Kbps	----	2 hops
[2, 9, 7, 8]	90 Kbps	----	3 hops
[2, 9]	60 Kbps	----	1 hops
[3, 9, 7, 5, 4]	30 Kbps	----	4 hops
[3, 9, 7, 8, 6]	75 Kbps	----	4 hops
[3, 9]	60 Kbps	----	1 hops

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[3, 9, 2, 10] 45 Kbps ---- 3 hops
[4, 5] 45 Kbps ---- 1 hops
[4, 5, 7] 75 Kbps ---- 2 hops
[4, 5, 7, 9, 2, 10] 30 Kbps ---- 5 hops
[5, 7, 8, 6] 75 Kbps ---- 3 hops
[5, 7, 8] 60 Kbps ---- 2 hops
[6, 8, 7, 9] 30 Kbps ---- 3 hops

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Utilization of the Links

SOURCE	DESTINATION	LOAD	UTILIZATION
1	4	450 Kbps	29.145 %
2	9	660 Kbps	42.746 %
2	10	150 Kbps	9.715 %
3	9	420 Kbps	27.202 %
4	5	540 Kbps	34.974 %
5	7	630 Kbps	40.803 %
6	8	285 Kbps	18.459 %
7	8	435 Kbps	28.174 %
9	7	720 Kbps	46.632 %

Max Utilization = 46.632 %

Average Utilization = 30.872 %

Path Length

SOURCE	DESTINATION	LOAD	HOPS
1	-----> 2	60 Kbps	5 hops
1	-----> 3	120 Kbps	5 hops
1	-----> 4	90 Kbps	1 hops
1	-----> 5	45 Kbps	2 hops
1	-----> 7	60 Kbps	3 hops
1	-----> 10	75 Kbps	6 hops
2	-----> 3	90 Kbps	2 hops
2	-----> 5	45 Kbps	3 hops
2	-----> 6	105 Kbps	4 hops
2	-----> 7	60 Kbps	2 hops
2	-----> 8	90 Kbps	3 hops
2	-----> 9	60 Kbps	1 hops
3	-----> 4	30 Kbps	4 hops
3	-----> 6	75 Kbps	4 hops
3	-----> 9	60 Kbps	1 hops
3	-----> 10	45 Kbps	3 hops
4	-----> 5	45 Kbps	1 hops
4	-----> 7	75 Kbps	2 hops
4	-----> 10	30 Kbps	5 hops
5	-----> 6	75 Kbps	3 hops
5	-----> 8	60 Kbps	2 hops
6	-----> 9	30 Kbps	3 hops

Average Hops = 3 Hops

TBar = 0.00531 seconds

Average Hops = 3.011 Hops

Max Utilization = 46.632 %

Average Delay = 0.02983 seconds

In [2]: