

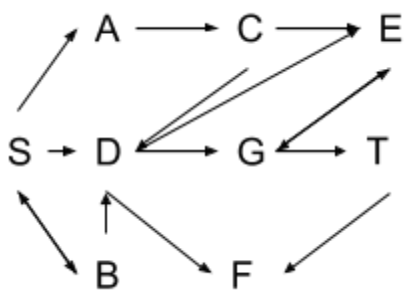
1)

	H	U	A	P	M	E	F	S
H	0	3	4	-1	-1	-1	-1	-1
U	-1	0	6	6	1	-1	-1	-1
A	-1	-1	0	7	2	-1	-1	-1
P	-1	-1	-1	0	-1	4	3	-1
M	-1	-1	-1	2	0	5	5	-1
E	-1	-1	-1	-1	-1	0	5	3
F	-1	-1	-1	-1	-1	-1	0	2
S	-1	-1	-1	-1	-1	-1	-1	0

	H	U	A	P	M	E	F	S
D[v]	0	3	4	6	2	5	5	-1
Prev[v]	null	H	H	U	A	M	M	null
Visited	True	True	True	False	True	False	True	False

$H \rightarrow A \rightarrow M \rightarrow F$

2)



3)

	S	A	B	C	D	E	F	G	T
D[v]	0	4	3	-1	4	1	5	2	3
Prev[v]	null	S	S	null	B	D	D	E	G
Visited	True	False	True	False	True	True	False	True	True

$S \rightarrow B \rightarrow D \rightarrow E \rightarrow G \rightarrow T$

4)

If the graph was undirected it would look a lot more formalized and structured than the above graph. The matrix would be symmetric with an undirected graph.

5)

If you have negative edge costs, the Dijkstra's algorithm will go towards those values because they're the "lowest" values

6)

If it found the largest-cost path then you wouldn't be finding your goal of looking for the most efficient path, and instead would have a pointless algorithm