

## problem6

1. The shortest distance between ORD and LAX: 2037

NO	V1	V2	V3	E1	E2	Distance
1	ORD	DFW	LAX	802	1235	<b>2037</b>
2	ORD	SFO	LAX	1846	339	2185

2. The shortest distance between JFK and SFO - 2588

NO	V1	V2	V3	V4	E1	E2	E3	Distance
1	JFK	ORD	DFW	SFO	742	802	1464	3008
2	JFK	BOS	SFO		189	2702		2891
3	JFK	ORD	SFO		742	1846		<b>2588</b>

3. Minimum spanning tree

Iteration Number	Vertex	Vertex	Edge	Action Taken
1	JFK	BOS	189	added
2	SFO	LAX	339	added
3	ORD	JFK	742	added
4	DFW	ORD	802	added
5	ORD	BOS	867	NOT ADDED
6	MIA	JFK	1092	added
7	DFW	MIA	1123	added
8	LAX	DFW	1235	added
9	MIA	BOS	1258	added
10	SFO	DFW	1464	NOT ADDED
11	SFO	ORD	1846	NOT ADDED
12	LAX	MIA	2342	NOT ADDED
13	SFO	BOS	2702	added

