Final Project OOP II/2009

Develop a program with specifications below:

- Able to receive the following input:
 - Departure City
 - Arrival City
 - Number of Passengers
- Able to output the following:
 - Output all the airplane that can fly between the two cities from the input, directly or indirectly (with lay-over/transit), and carry the number of passengers given.
 - For each type of airplane output the following:
 - Type of airplane
 - Speed in kilometer/hour and mach
 - Range in kilometers and nautical miles
 - Number of Seats
 - Path of Travel
 - Flight Time
- Your codes should include at least 2 superclasses or 2 interfaces or 1 superclass + 1 interface
- Use JAVA coding guidelines and OOP Theories
- Table of distance between cities and airplane specifications are given below

City	Amsterdam	Beijing	Cairo	Denver	Frankfurt	Hong Kong	Geneva	Istanbul	Jakarta
Amsterdam	0	7815.02	3282.76	7724.81	-	9262.42	692.47	2210.17	11359.19
Beijing	7815.02	0	-	10191.43	7785.76	1991.95	8199.39	7059.44	5239.33
Cairo	3282.76	-	0	-	2920.81	8117.11	2813.79	1236.57	8980.42
Denver	7724.81	10191.43	-	0	8087.29	12027.61	8241.52	9873.17	15113.22
Frankfurt	-	7785.76	2920.81	8087.29	0	9151.97	463.66	1869.04	11122.1
Hong Kong	9262.42	1991.95	8117.11	12027.61	9151.97	0	9504.62	7996.54	3259.64
Geneva	692.47	8199.39	2813.79	8241.52	463.66	9504.62	0	1915.04	11322.07
Istanbul	2210.17	7059.44	1236.57	9873.17	1869.04	7996.54	1915.04	0	9452.58
Jakarta	11359.19	5239.33	8980.42	15113.22	11122.1	3259.64	11322.07	9452.58	0

Airplane	Speed	Range	Seats
Airbus 319	1004.53	3350	124
Airbus 320	1004.53	4800	240
Airbus 340-600	1053.53	14360	380
Airbus 380	1090.28	15200	525
Boeing 737-900ER	955.52	5925	180
Boeing 777-200LR	1029.03	9380	301
Boeing 787-9	1041.28	14800	250
Boeing 747-8	1047.4	14815	467
Embraer 170	1004.53	3890	70
Embraer 175	1004.53	3704	78
Embraer 190	1004.53	4445	98
Embraer 195	1004.53	4074	108

Notes:

- 1. Distance are in Kilometer
- 2. Speed are in Kilometer/Hour
- 3. Range are in Kilometers