Discrete Math In-class assignment Jan 24

In section 1.2, a matching problem is described: 7 pilots (whom I have abbreviated T, J, R, A, G, W, Z) have indicated which cities they would prefer to fly to (which I have abbreviated with the airport codes). The person assigning flights would like to grant as many requests as possible. The book analyzes the feasibility of a brute-force calculation approach, which we will discuss tomorrow. Today, you will be trying to find an algorithm (a strategy that is specific enough that you could teach it to a computer) to make an assignment.

Your task is to develop and test an algorithm (I have included 3 other fictional data sets to test your algorithm on),
Describe your algorithm clearly (this is the main thing I'm looking for!)
Describe some of its strengths and weaknesses.

Example from textbook

Cities	Pilots requesting
LAX	T, J, R
SEA	A, T, G, W
LGW	T, G, W
FRA	A, T, R, Z
CDG	J, W, R
MAD	J, Z
DUB	T, R, Z

LAX	C, D, H,
SEA	D, F, G, H, K,
LGW	B, D, H, L,
FRA	D, I, J,
CDG	B, D, E,
MAD	B, E, I, K,
DUB	B, K,
MSP	A, G,
JFK	A, F, H,
SLC	A, F, H,
ORD	J, L,
RSW	A, J, K,

LAX	A, B, F,
SEA	C, H, K,
LGW	B, D, E,
FRA	F, G, J,
CDG	F,
MAD	F, K,
DUB	G, H, J,
MSP	C, D, F,
JFK	F,
SLC	I, J, L,
ORD	A, D, J, K,
RSW	C, I,

LAX	C, G, J,
SEA	F,
LGW	B, C, D, E, I, K,
FRA	E, F, I, L,
CDG	F,
MAD	A, C, I, J,
DUB	E, G,
MSP	A, C, J,
JFK	B, C, D,
SLC	G, K,
ORD	C, D, E,
RSW	H,