CSE 421 Lynda Pham
Homework 1 – P1

A stable matching is one in which there is no incentive for some pair to undermine the assignment by joint action, as defined in lecture. Then, for a stable matching where every man is matched to his least preferred woman, the woman must prefer her partner the most of all valid matches so that she has no incentive to dump him.

The following is a stable assignment based on the preferences shown below:

(M_1, W_1), (M_2, W_2), (M_3, W_3), (M_4, W_4)

	1st choice	2nd choice	3rd choice	4th choice
W_1	M_1	M_2	M_3	M_4
W_2	M_2	M_1	M_3	M_4
W_3	M_3	M_1	M_2	M_4
W_4	M_4	M_1	M_2	M_3

	1st choice	2nd choice	3rd choice	4th choice
M_1	W_2	W_3	W_4	W_1
M_2	W_1	W_3	W_4	W_2
M_3	W_1	W_2	w_4	W_3
M_4	W_1	W_2	W_3	W_4