

Assignment 4:

(keeping this fairly short to enable quick grading)

1. Calculate the Duncan Index of Dissimilarity (also called the Duncan segregation index) for the following town, with four sectors:

- a) Total male workers 2000, total female workers 1900.

Occupation	Males	Females
Blue collar	1100	500
Pink collar	200	700
White collar (office workers)	600	500
Other	?	?

Note: with four sectors, if you know the number of workers by type in three sectors and you know the total, you can calculate the last sector's workers by type.

- b) Sample business male workers 1600, total female workers 2000.

Occupation	Males	Females
tradespeople & drivers	800	200
Pink collar (clerical and sales)	200	1200
Senior management	80	4
Other management	?	?

- c) More practice with game boxes:

- a) Define a dominant strategy and describe how you would find one in a two-by-two game (two players, two choices).

- b) For the following games,

- a. Determine whether either player has a dominant strategy
- b. Find any Nash equilibria that exist (this is in pure strategies for the technically minded).
- c. (Not required, but it is worth thinking about the information provided by the payoffs. Does either person really like travelling with the other vs just going where they want to?)

Game 1:

	Lir's choices:	Sweden	Mexico
Rem's choices			
Sweden		(12, 16)	(7, 4)
Portugal		(3, 5)	(5, 9)

Game 2:

Rem's choices	Lir's choices	Sweden	Portugal
Sweden		(8, 6)	(7, 10)
Portugal		(3, 5)	(4, 8)

Game 3:

Rem's choices	Lir's choices:	Kenya	Portugal
Sweden		(40, 75)	(32, 40)
Portugal		(22, 18)	(44, 55)