All,

When you “load the pMRF.mat”

it is data structure that is “potential functions”

of the pairwise MRF (between two variables).

Note that

-we have four random variable in the problem labeled 1 ,2 , 3, 4 (or you can call them w , x, y, z)

-each random variable takes two values

each 2X2 table in that data structure correspond to  one potential function table

for example

in matlab:

>> phi(1)

ans =

    variables: [1 2]

        table: [2x2 double]

Hence, phi(1) is correspond to

random variables  1 and 2 ( w and x)

in matlab

>>phi(1).table

ans =

    0.0936    0.0335

    0.6840    0.7243

the above are correspond to table representation of the potential function between variable  1 and 2 (w and x)

Similarly

>> phi(2)

ans =

    variables: [2 3]

        table: [2x2 double]

phi(2) gives you the potential function in the form of a 2X2 table for variables 2 and 3 (x and y)

phi(2).table

ans =

    0.0877    0.1376

    0.0010    0.1484

try same way phi(3), through phi(5)

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Note that there is an error in the setup of the data structure, once you load pMRF.mat.

The current version says

>> phi(3)

ans =

    variables: [3 1]

        table: [2x2 double]

You must correct this as

>> phi(3)

ans =

    variables: [3 4]

        table: [2x2 double]

In other words,

phi(3) must give the potential table between variable 3 and variable 4.