

8								
7								
6								
5								
4								
3								
2								
1								
	1	2	3	4	5	6	7	8

Chromossome

3	5	7	8	2	1	4	6
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3 means queen is
positioned in column
1 and line 3

5 means queen is
positioned in column
2 and line 5 so on...

objective function is given as below:

$$f(\text{chromosome}) = (l_1+c_1+d_1)+\dots+(l_8+c_8+d_8)$$

l_{ij} means the amount of queens in the line i

c_{ij} means the amount of queens in the column j

d_{ij} means the amount of queens in the diagonals crossed by (i,j)

$f(\text{chromosome})=0$ means that the objective is reached

each queen is alone in the line, column, diagonals

or $q_{ij}=1$ or 0 , if

queen is or not at
the position (line i ,
and column j)