Unit 2. Trajectory-Based Metaheuristics

1. True or False?

	TRUE	FALSE
Tabu search always moves to the best available neighborhood solution point, even if it is worse than the current solution point.		
The N-Queen problem is seen as an optimization problem where the optimal solution has 0 collisions		
When the N-Queen problem is seen as a permutation problem: The search strategy will start with an empty assignment		
The N-Queen problem is seen as: A permutation problem where Queen i, can be placed in any column j, of the row i.		
In order to consider N-Queens as a permutation problem: Two Queens cannot be in the same column nor in the same row		
In order to consider N-Queens as a permutation problem: All the collisions in rows, columns and diagonals must be taken into account to calculate the evaluation function		
In order to consider N-Queens as a permutation problem: Only collisions in the same diagonal must be considered to calculate the evaluation function		

2. Link words and definitions:

When the objective reaches a pre-specified threshold value.

It allows to revoke a tabu state when is best than the current best

Where a tenure value is stored

Deterministic metaheuristic

The "time" that a candidate solution can be in the tabu table

After some number of iterations without an improvement in the objective function value

Stochastic metaheuristic

- Tabu search
- Termination criterion
- Tenure
- Simulated Annealing search
- Tabu table
- Aspiration Criterion