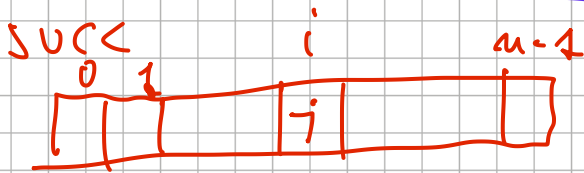
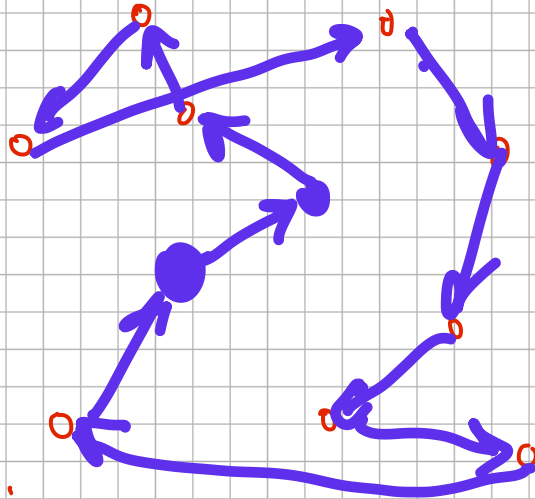


CONSTRUCTIVE HEURISTICS FOR TSP

OR2 11-MAR

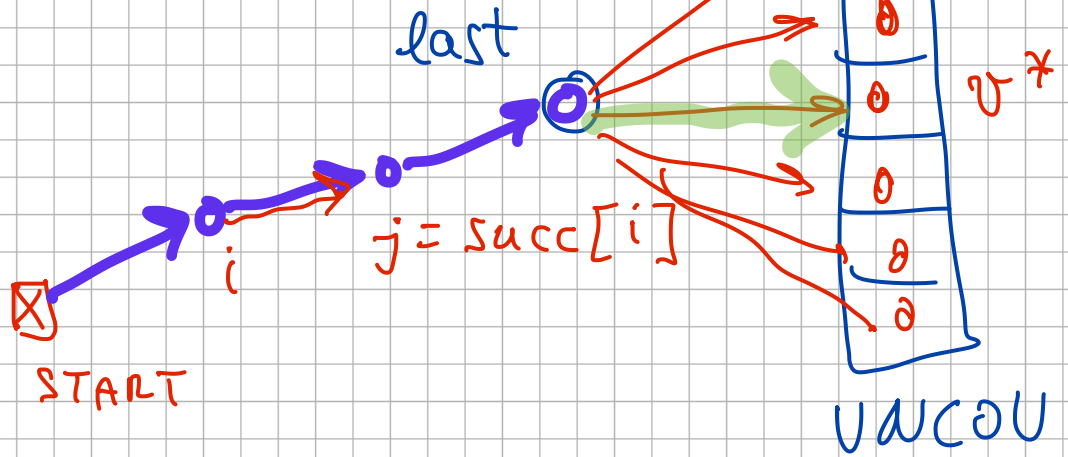
GREEDY heuristic

"NEAREST NEIGHBORHOOD HEU."



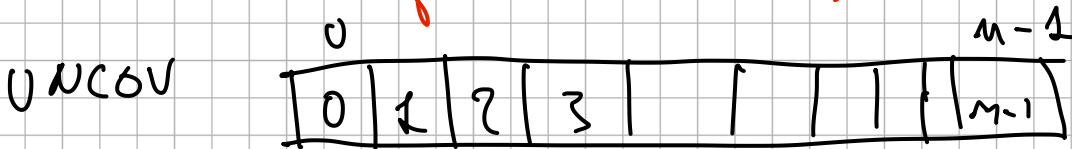
VALUE

inst \rightarrow
best-value
BEST-SOL

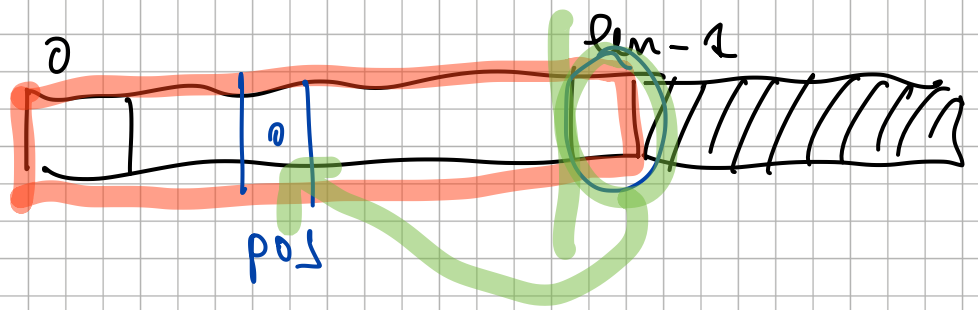


$$\text{succ}[\text{last}] = v^*$$

"remove v^* from the list of UNCOU nodes"



UNCOV



$$\begin{cases} \text{UNCOV}[\text{pos}] = \text{UNCOV}[\text{len}-1] \\ \text{len} = \text{len} - 1 \end{cases}$$

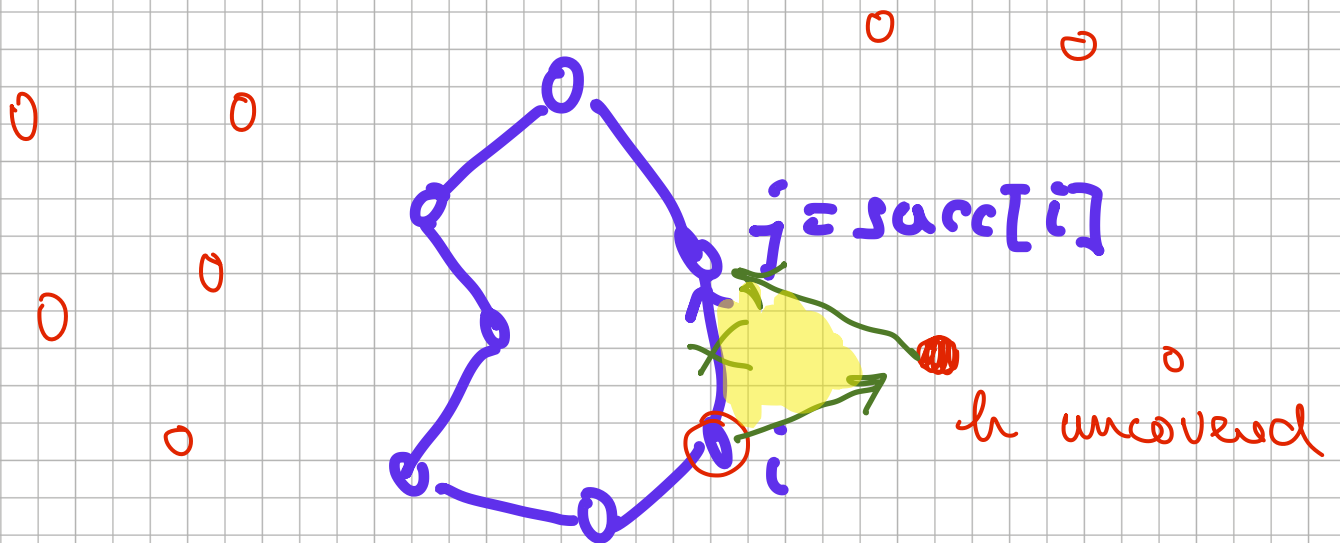
$$\text{UNCOV}[\text{pos}] = \text{UNCOV}[\text{len}]$$

COMPLEXITY: $O(n^2)$

START = ?

- node 0
- random
- ↓ 0, 1, ..., n-1

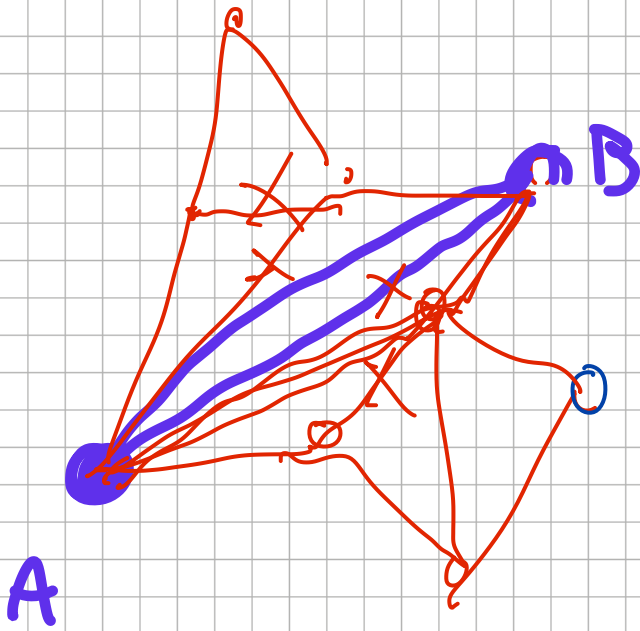
EXTRA - MILEAGE



— partial sol.

$$\Delta(i, h) = c[i, h] + c[h, \text{succ}[i]] - c[i, \text{succ}[i]]$$

⇒ minimum



A, B τ ?

distance cost
A - B
is a MAX.

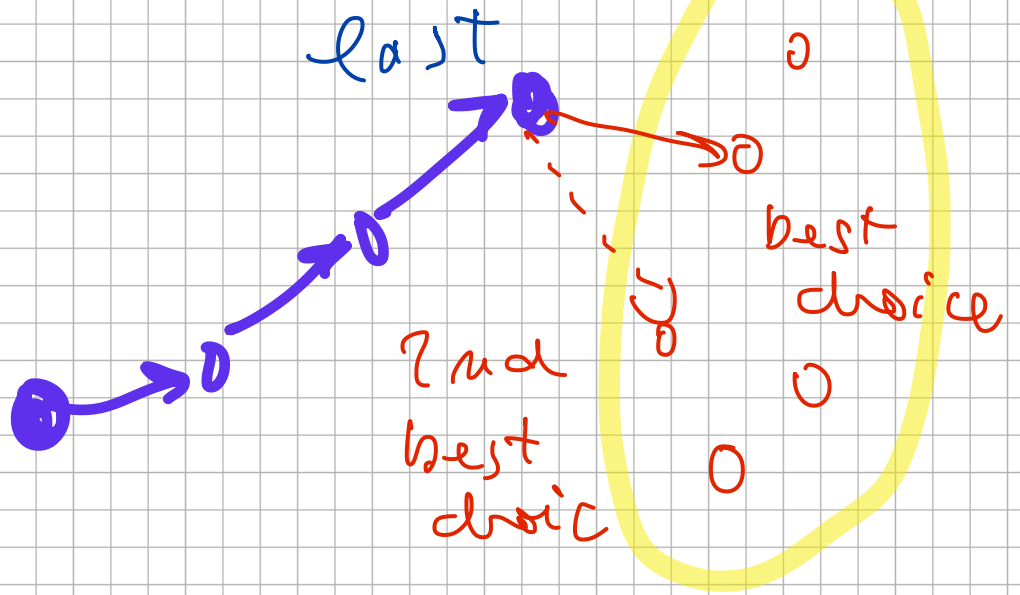
→ A, B random

→ they all
A, B

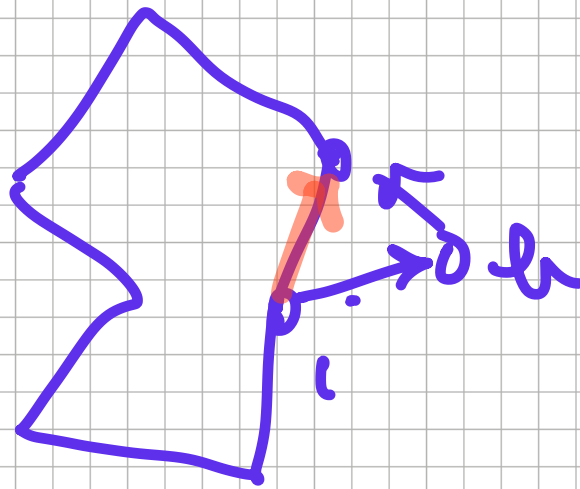
RANDOMIZATION

GRASP
- - - -

GREEDY



EXT-MICO.



PARALLEL IMPLDM. ?

"THREAD-SAFE"