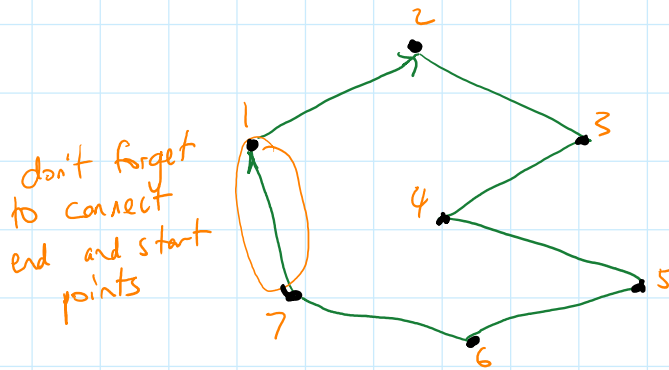


Traveling Salesperson Problem (TSP)

1. Compute distance of a tour

$\text{math.dist}(a, b)$ ← doesn't work in Colab

Use distance formula instead: $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

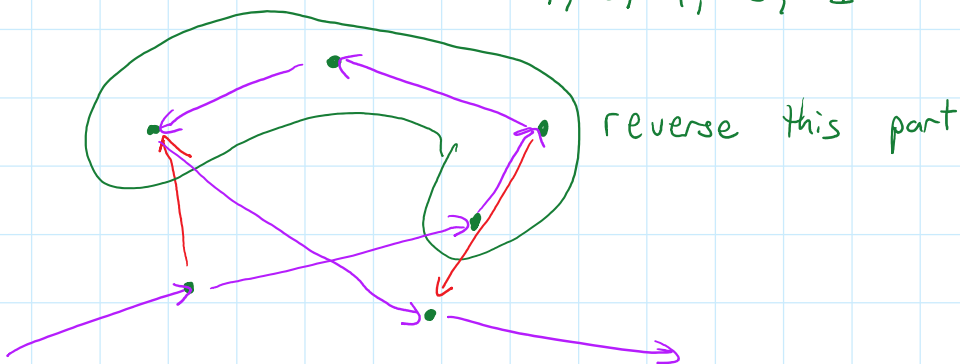


Note: closed tour!

2. Transitions from one tour to another:

tour: $[3, 2, 5, 0, 1, 6, 4, 8, 7]$

reverse part of the tour
 Swap 7, 8, 4, 6, 1



list slices:

$\text{tour}[i:j:-1]$ ← selects and reverses
a slice of the list
 $i > j$ ↑
 step
 size

$\text{tour}[i:j][::-1]$ ←
 $i < j$

You can assign to list slices

$\text{tour}[i:j] = \underline{\text{another list of the correct length}}$