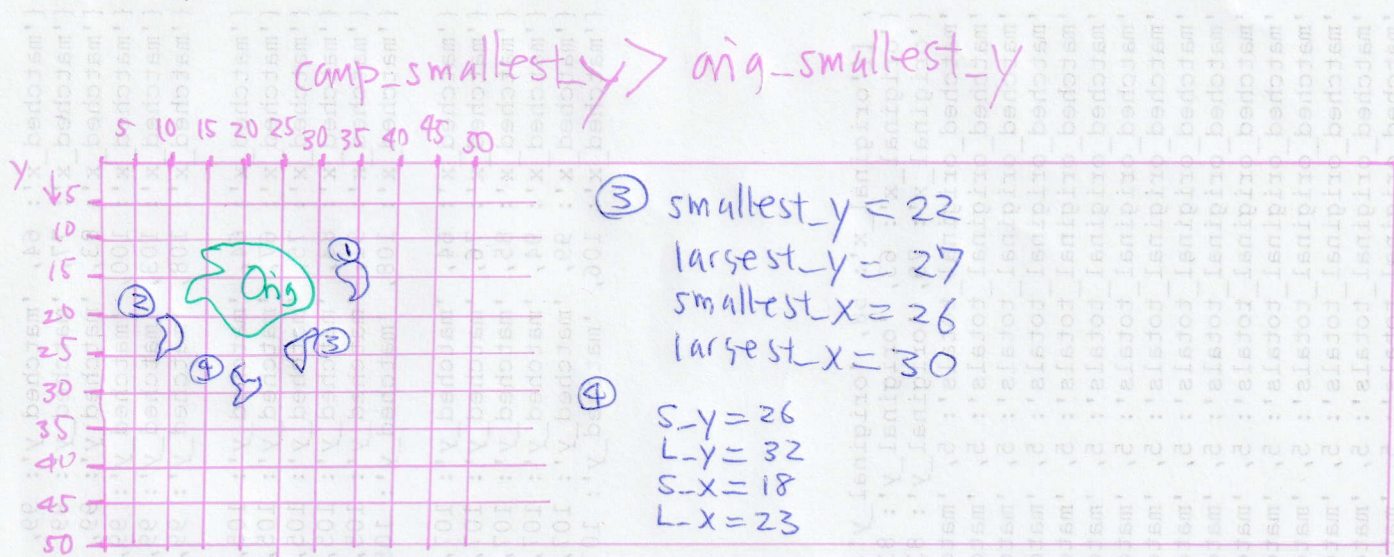


find_direct_neighbours ... 2

compare shape is below original shape



original
smallest_y = 11
largest_y = 22
smallest_x = 13
largest_x = 29

① smallest_y = 13
largest_y = 18
smallest_x = 33
largest_x = 37

② smallest_y = 20
largest_y = 26
smallest_x = 8
largest_x = 12

To be candidate for original shape's neighbor, ~~comp~~ comp_smallest_y has to be less than or equal to original's largest_y.

$$\text{comp_smallest_y} \leq \text{orig_largest_y} \quad \text{orig_neighbor_bottom}$$

So...

$$\text{If } \text{comp_smallest_y} > \text{orig_smallest_y}$$

$$\text{If } \text{comp_smallest_y} \leq \text{orig_largest_y} \quad \text{orig_neighbor_bottom}$$

original and compare shape are may be neighbors.

Compare shape is further left than original

$$\text{comp_smallest_x} \leq \text{orig_smallest_x} \quad \text{orig_neighbor_left}$$

condition to be original's neighbor candidate

$$\text{If } \text{comp_smallest_x} \leq \text{orig_smallest_x} \quad \text{orig_neighbor_top_left}$$

$$\text{If } \text{comp_largest_x} \geq \text{orig_smallest_x}$$

Compare shape is further right than original

$$\text{If } \text{comp_smallest_x} \geq \text{orig_smallest_x} \quad \text{orig_neighbor_left}$$

$$\text{If } \text{comp_smallest_x} \leq \text{orig_largest_x} \quad \text{orig_neighbor_right}$$