

## Next closest well

**Rig locations** = [(599, 160), (313, 758), (145, 226)]

**Well locations** = [(307, 917), (741, 293), (299, 880), (313, 573), (370, 606), (946, 48), (376, 278), (353, 276), (318, 854), (939, 529)]

**Rig Dictionary** = [{'name': 'Rig 1', 'processing time': 0, 'rigs locations': (599, 160), 'assigned wells': []}]

**Wells Dictionary** = [{'name': 'well 1', 'processing\_time': 2, 'well\_location': (307, 917)}, {'name': 'well 2', 'processing\_time': 2, 'well\_location': (741, 293)}]

### Steps:

Initially all rig processing times are 0.

1. We can find distance matrix from **minimum processing time rig**(at first iteration it is rig0) with all well locations and then we find the minimum distance well.
2. We will update the location of Rig with minimum distance well location.
3. We can add the processing time of min distance well to Rig.
4. We can sort the rigs in ascending order based on processing times, then we get minimum processing time rig at first place. In next iteration we can go for minimum processing time rig.

we can repeat the same process until all wells should be assigned.