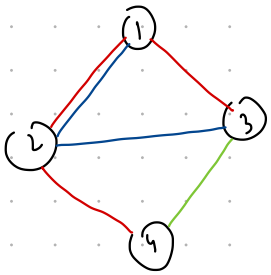
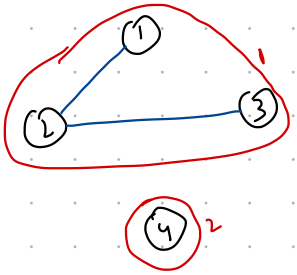


Type 1 Alice
Type 2 Bob
Type 3

This is ans

stores num of edges needed out t-1

Type3 only



2 conn comp found

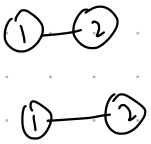
nodes mapped to components
1 → 1
2 → 1
3 → 1
4 → 2

Consider a component as a node. Create graph for Alice and build graph by using components as nodes. Repeat for bob. Note → skip edges which are in same component.

Alice → { 1 → [ ]
2 → [ ] }
⟹ { 1 → [2]
2 → [1] }

Bob → { 1 → [2]
2 → [1] }

Alice →
Bob →



Both have only 1 cc each. Can continue. Else return -1

→ NOTE → A connected component needs N-1 edges when it has N nodes. MST.

During first step → For each connected component, get the number of edges needs → += size-1

→ After creating Alice & Bob, they too need to traverse all connected components with Total conn components - 1 edges.