**Solution**

To solve this problem, we first have to show that it is in NP. Given a proposed solution to this problem, we can easily check that it is a valid sequence. So we have shown Perfect Assembly to be in NP.

Given that this is sequencing problem, we can use Hamiltonian Path to show that this problem is NP complete. Given an instance of Hamiltonian Path $G = (V, E)$ we can think of each vertex as an element S in Perfect Assembly, and each edge as a corroborating element in T. Therefore, a solution to Hamiltonian Path in which we visit each node corresponds to a valid solution for Perfect Assembly because we can only follow the path if the sequence is valid.