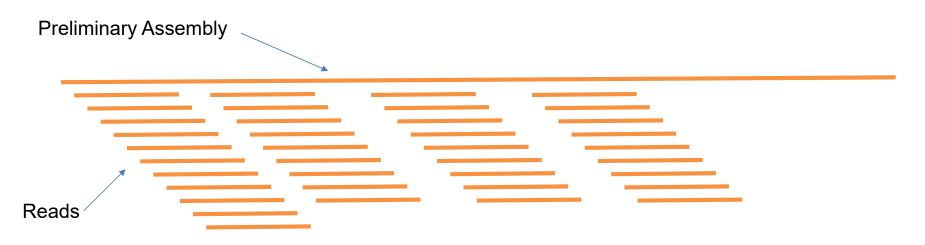
## We now have a preliminary assembly

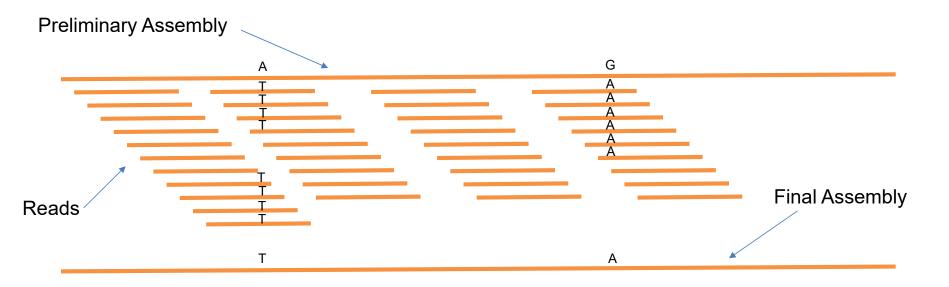
**Preliminary Assembly** 

## Improve the quality of the assembly: Polishing



- We can map the quality filtered reads to this preliminary assembly.
- This is similar to the initial read mapping to the reference genome done previously.

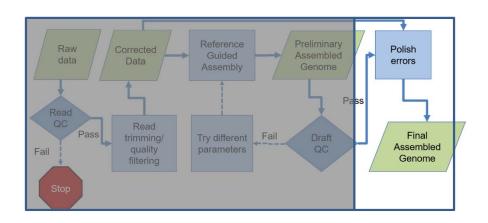
## Improve the quality of the assembly: Polishing



- The read sequences may disagree with the assembly sequence at certain positions.
- Identifying these differences will enable us to correct small-scale errors, yielding a more accurate final assembly.
- A final assembly will be generated with the corrected sequences.

## **Polishing the Genome**

Genome



- "Polish" out errors in the assembly by mapping the reads back to the assembly.
- Identify positions where the read sequences differ from the draft genome.
- Correct the draft sequence at those positions, producing a higher quality final assembled genome.

