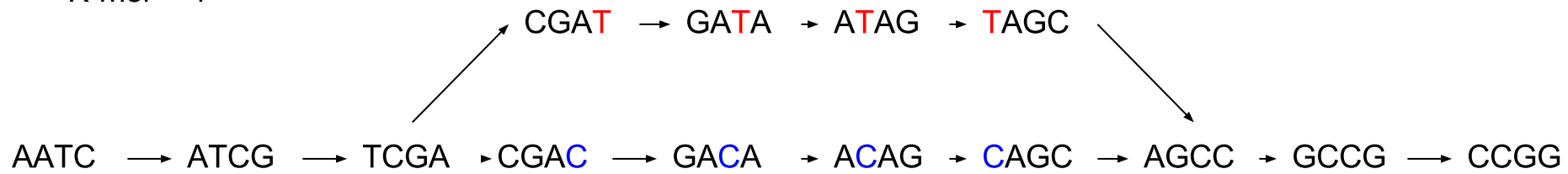Given reads

R1: AATCGA
R2: CGACAGCC
R3: GCCGG
R4: CGATAGCC

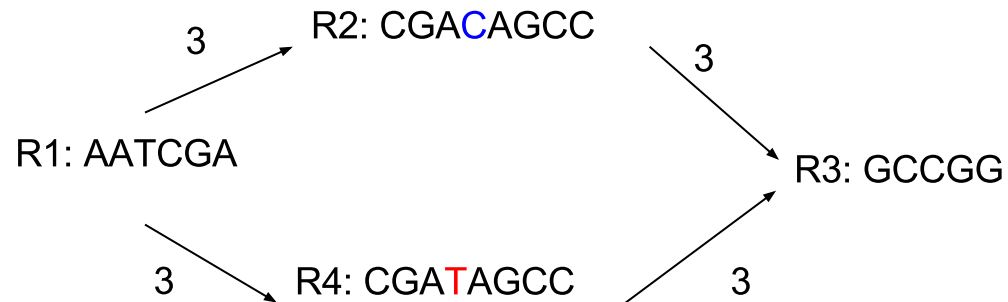Goal: recontruct haplotypes from reads

H0: AATCGACAGCCGG
H1: AATCGATAGCCGG

K-mer = 4

CGAT → GATA → ATAG → TAGC

AATC → ATCG → TCGA → CGAC → GACA → ACAG → CAGC → AGCC → GCCG → CCGG

(a)   De bruijn graph

R2: CGACAGCC

3

R1: AATCGA

3

R3: GCCGG

3

R4: CGATAGCC

3

(b) Overlap graph