Alien DNA Challenge

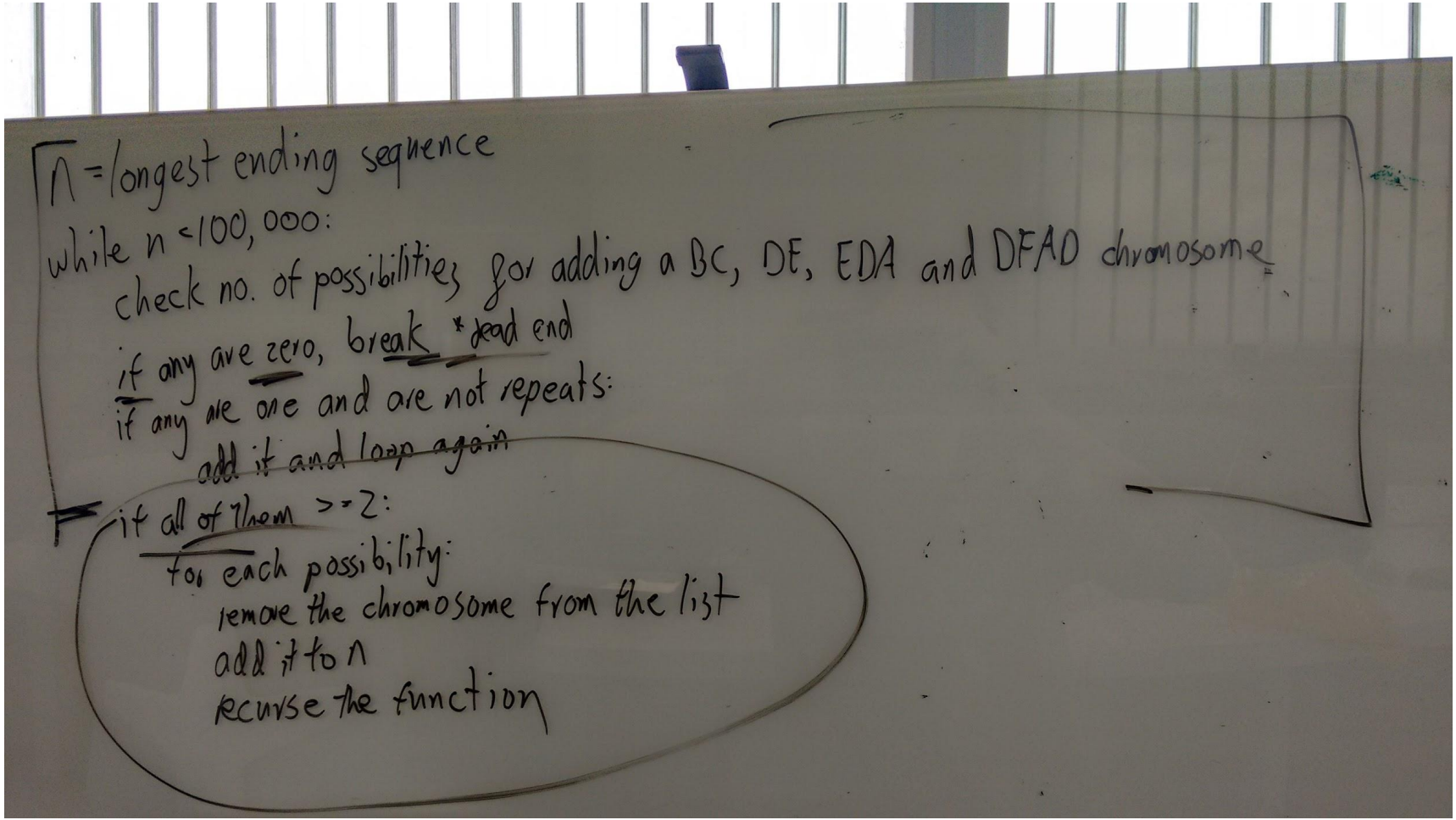
Team 1G3M

Quick Overview

- One great big massive ‘master string’, up to 10,000,000 characters long
- 5 Files, each containing a different ‘rearrangement’ of the string
  - The BC_digest contains many many substrings, all (bar one) ending in BC
  - These substrings are then stored in a list, and randomly jumbled about
  - Cuts at BC, DE, DFAD, EDA, ABB
- We have to reconstruct the master string, using only the 5 rearrangements
  - Whichever team works out the biggest chunk of the master string wins

How we solved it

Magic.


n = longest ending sequence
while n < 100,000:
check no. of possibilities for adding a BC, DE, EDA and DFAD chromosome
if any are zero, break *dead end
if any are one and are not repeats:
add it and loop again
if all of them >= 2:
for each possibility:
remove the chromosome from the list
add it to n
recurse the function

Any questions?