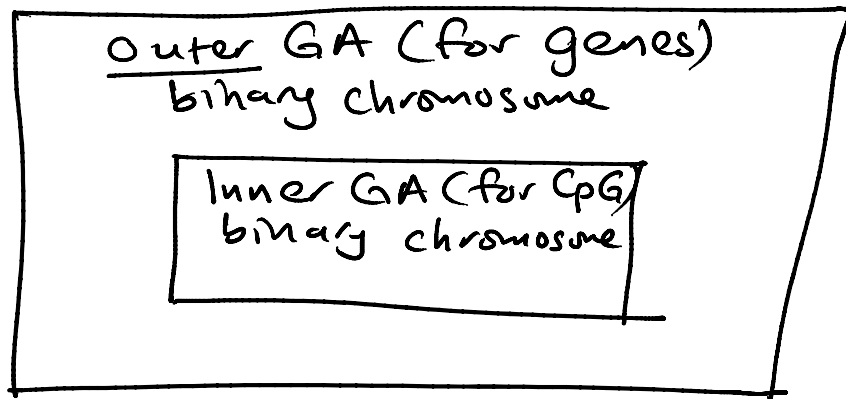
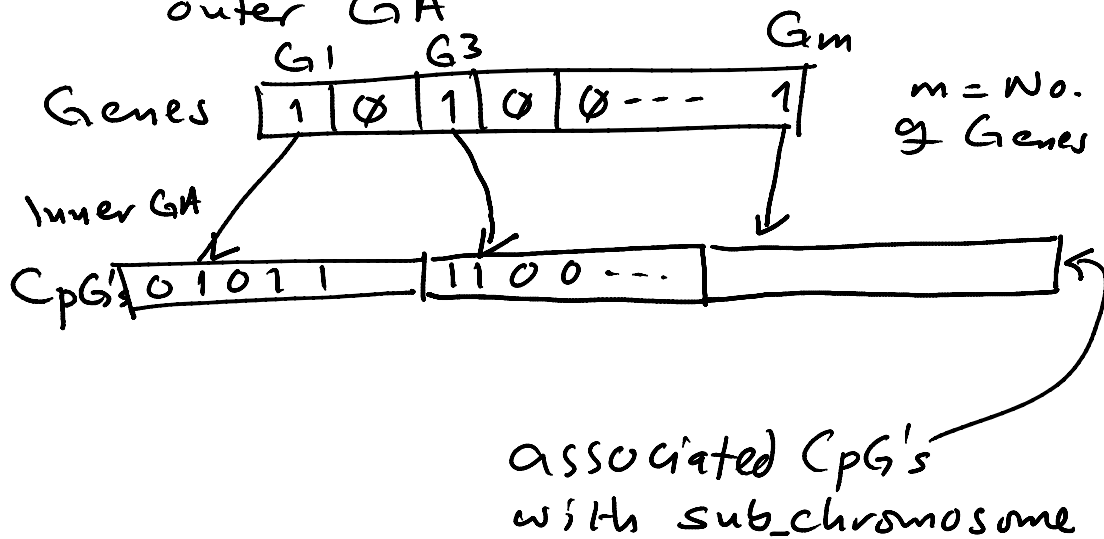


Q6 DNA methylation.

step 0 Design of algorithm "nested GA"



step 1 Design of chromosome outer GA



1 : Gene active } outer GA
0 : Gene in-active }

1 : CpG active } inner GA
0 : CpG in-active }

step 2 Fitness function

outer fitness of outer takes from
inner GA fitness

Inner NN to Predict output
of dataset malignant/
benign

Apply Cross validation LOO
(Leave-one-out)

NOTE : should be
explained (LOO)

NOTE 2 : should show dataset
applied on subset chromosome
↓
and its subset dataset

step 3 Design of Crossover

Normal bit string crossover

step 4 : Mutation

Normal Flip-bit mutation

step 5 Replacement

Use Elitist strategy

NOTE should be explained.