

CIIT 2020 Examination-2 at BSTU

Remembering my lecture, decode the following chromosome
(2,1,3,3,1,8,4,6,3)
to the route of TSP of 10 cities starting with A! Explain also why.

In Sorting Network Problem of 8 alphabets, sorting result of a chromosome is A B H G F E D C. Estimate the fitness with the algorithm I gave you in my lecture! Explain also why.

In IPD, Player B has the following 64-bit binary chromosome
111101011010111000101100010100 1100101001001101010100111000101100.
Then the final action of B?

A: 110101101100

B: 11101001000?

Explain also why.

Using Fitness sharing algorithm with $\sigma = 5$, calculate shared fitness of dog-A, assuming dogs start (500,500) and one sausage is located at (800,800). So the original fitness is $600 - \{\text{Manhattan-distance between the final location and nearest sausage}\}$. Explain also why.

