

1. Create an example of child from two parents 11001100 and 11100111 by (i) one point crossover and (ii) uniform crossover.
2. Assuming fitness of four chromosomes are 0.8, 0.4, 0.2, 0.1, what should be the probability of the 4th chromosome (whose fitness is 0.1) will be chosen?
3. In Iterated Prisoner's Dilemma (IPD), when a chromosome with a definition in the PDF text is
1111000011110000111100001111000011110000111100001111000011110000
and history of the game is 1-0-1-0-1-0. what should be next? And why?
4. In evolving Finite State Machine by GA, why the number of state should be like 2,4,8,16,32,... rather than 7 for example?