

Name: Vadim Parafenuk (Вадим Парафенюк)

Size of chromosome: 10

Capacity of population: 10

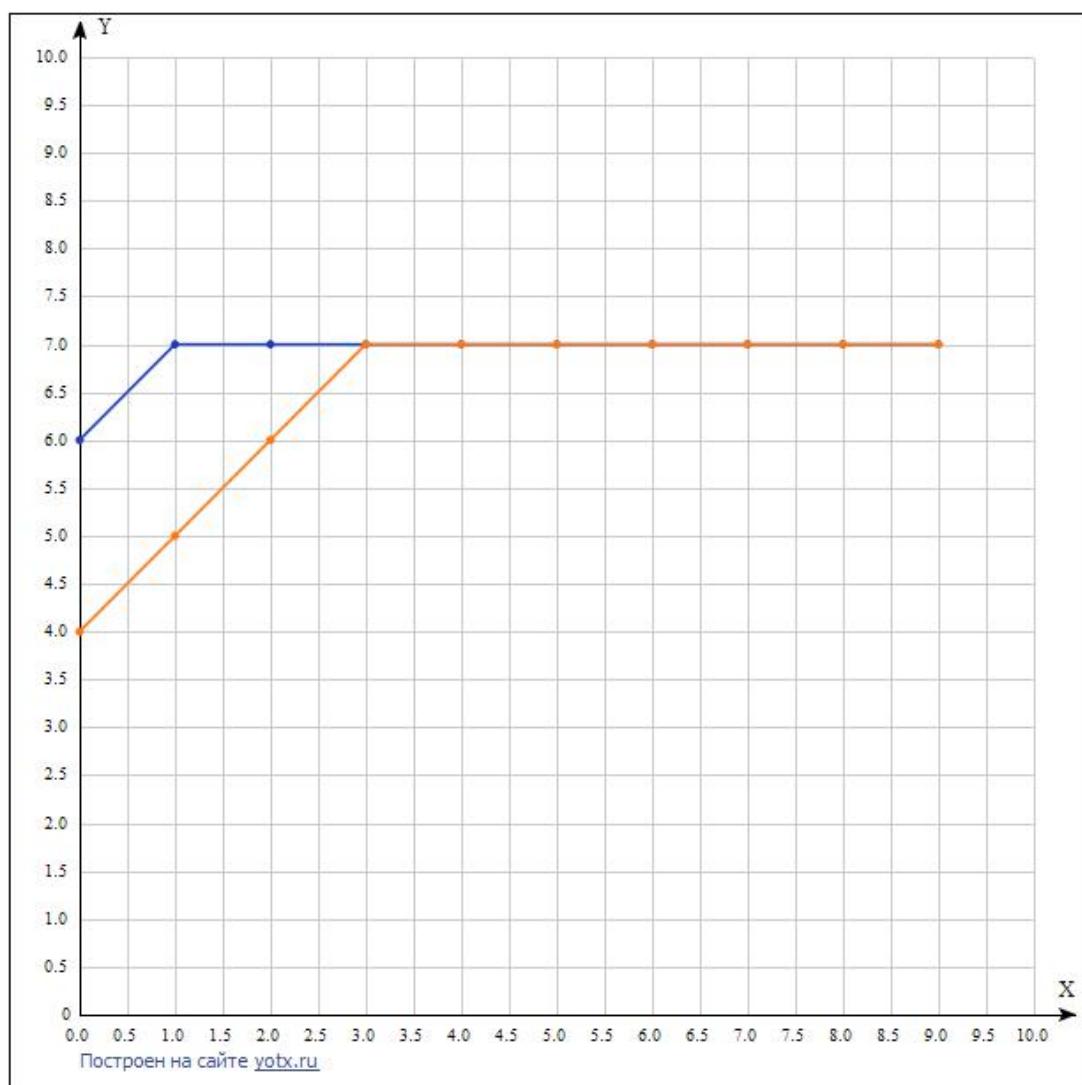
Epoch (generations): 10

No mutation

Onepoint crossover

Truncate selection

First experiment: 50% of ones and 50% of zeros

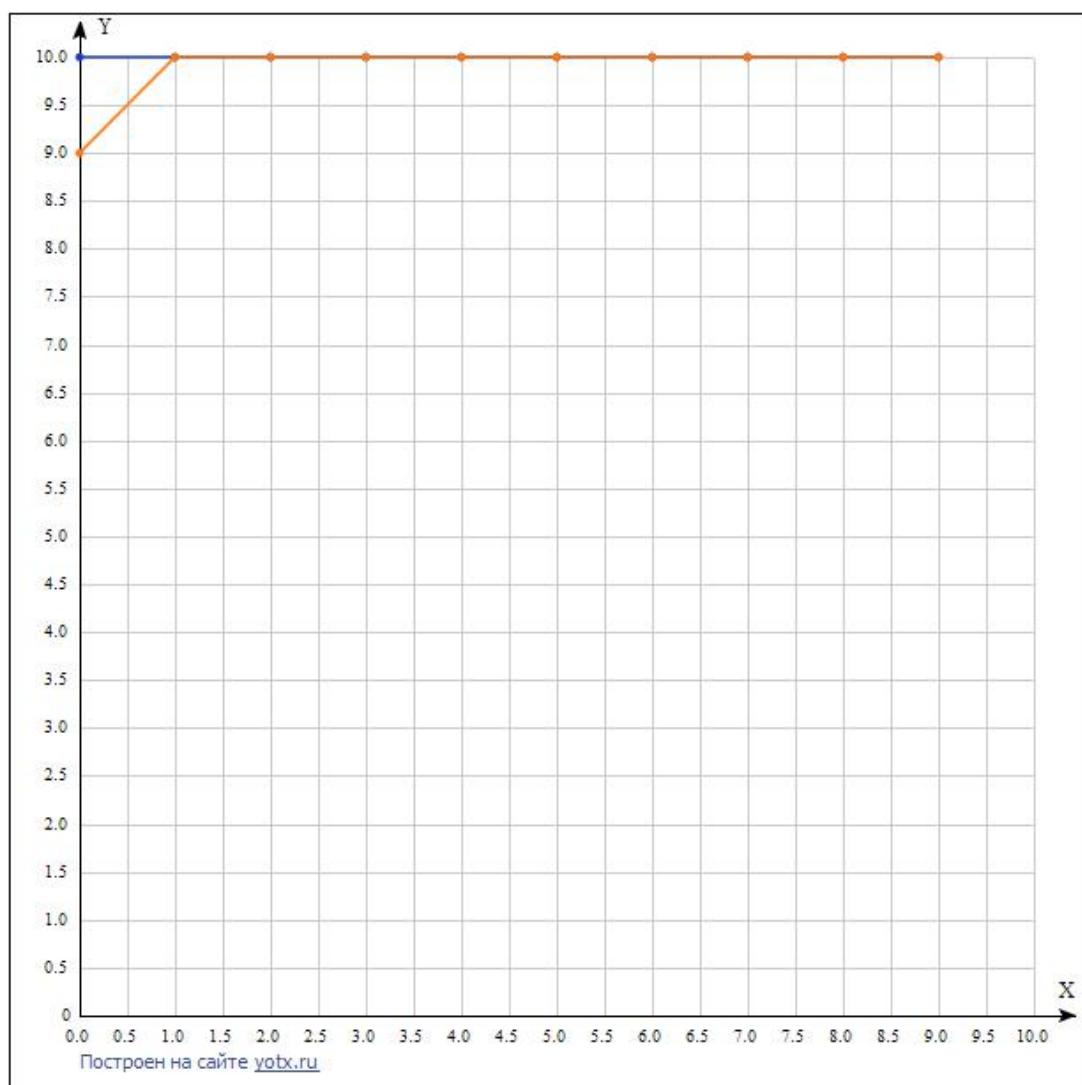


Blue line - best (largest number of ones)

Red line - average (per population)

As i can see, in this situation population can't achieve good result (at least one chromosome which consist of only ones)

Second experiment: 90% of ones and 10% of zeros

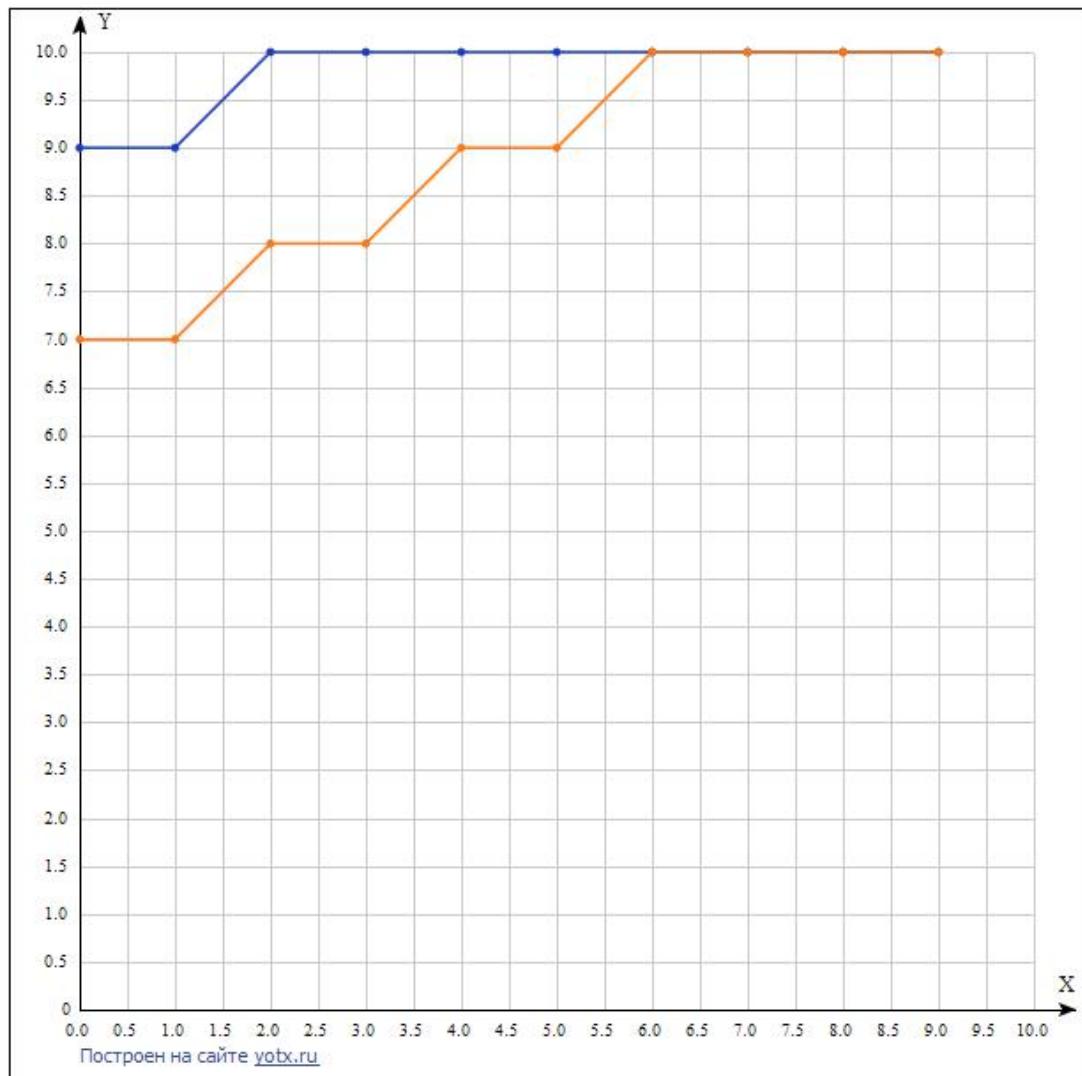


Blue line - best (largest number of ones)

Red line - average (per population)

As i can see, in this situation population achieve best result and it do it very fast.

Third zeros experiment: 75% of ones and 25% of



In this situation population evaluate smoothly and achieve best result.

Conclusion: if i pick 50% of ones and 50% of zeros, population will not achieve good result. 90% of ones and 10% of zeros allow population to achieve good result quickly. And 75% of ones and 25% of zeros lead to achieve good result smoothly.