

Name: Siarhei Piashko (Сергей Пешко)

Size of chromosome: 10

Capacity of population: 10

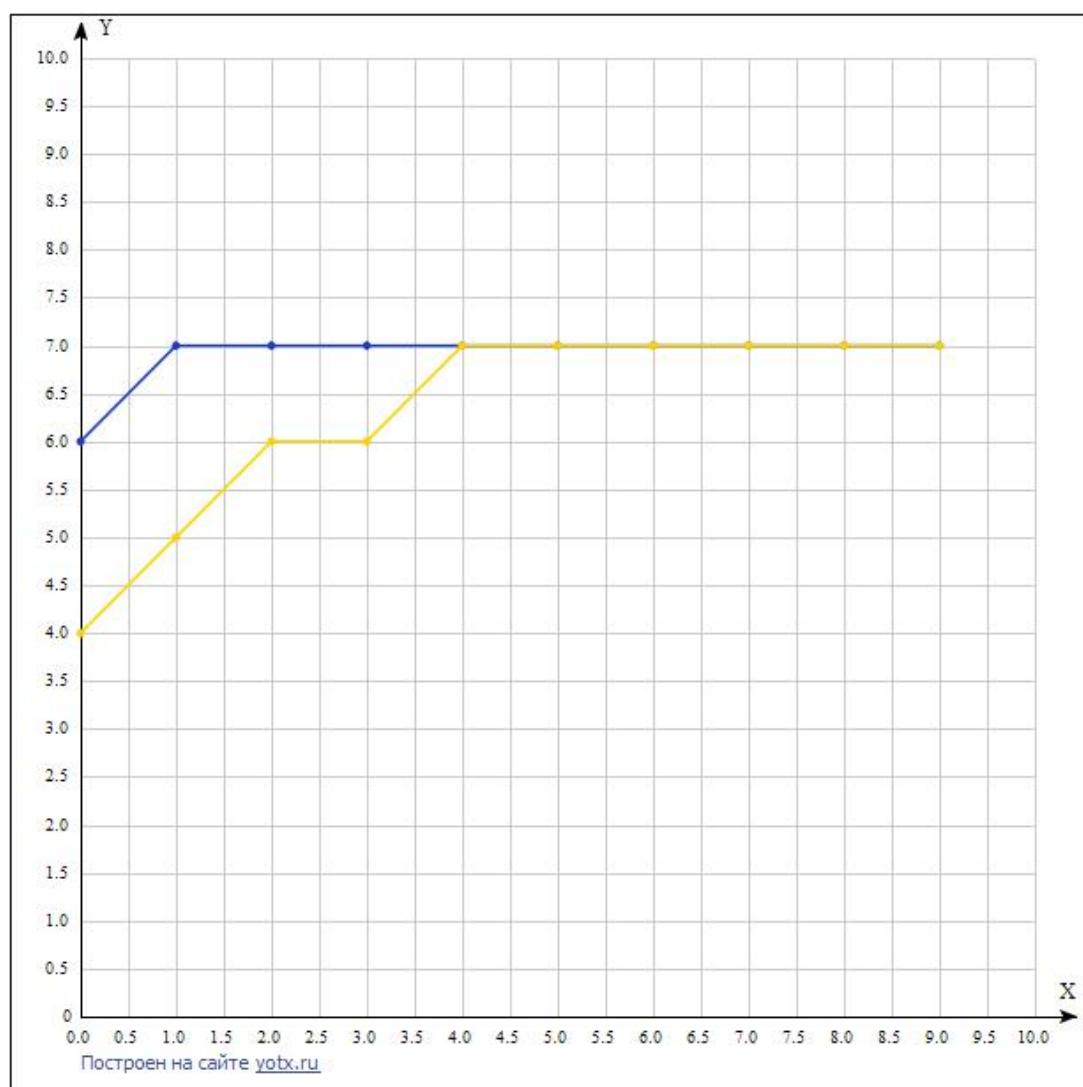
Epoch (generations): 10

No mutation

Onepoint crossover

Truncate selection

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

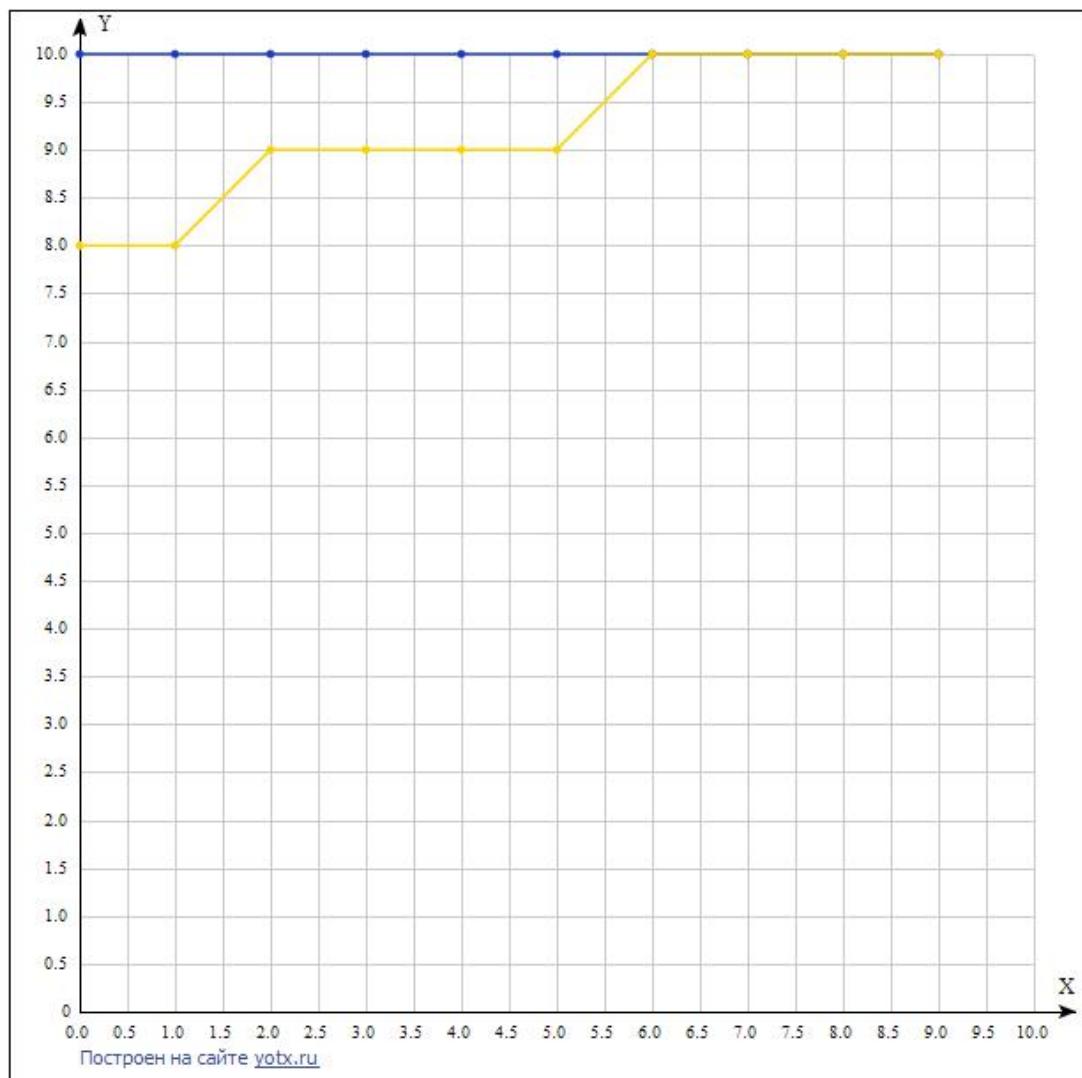


Blue line - best (largest number of ones)

Yellow line - average (per population)

As i can see, in this situation population can't achieve good result, because no mutation, we should add mutation and more epoch.

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

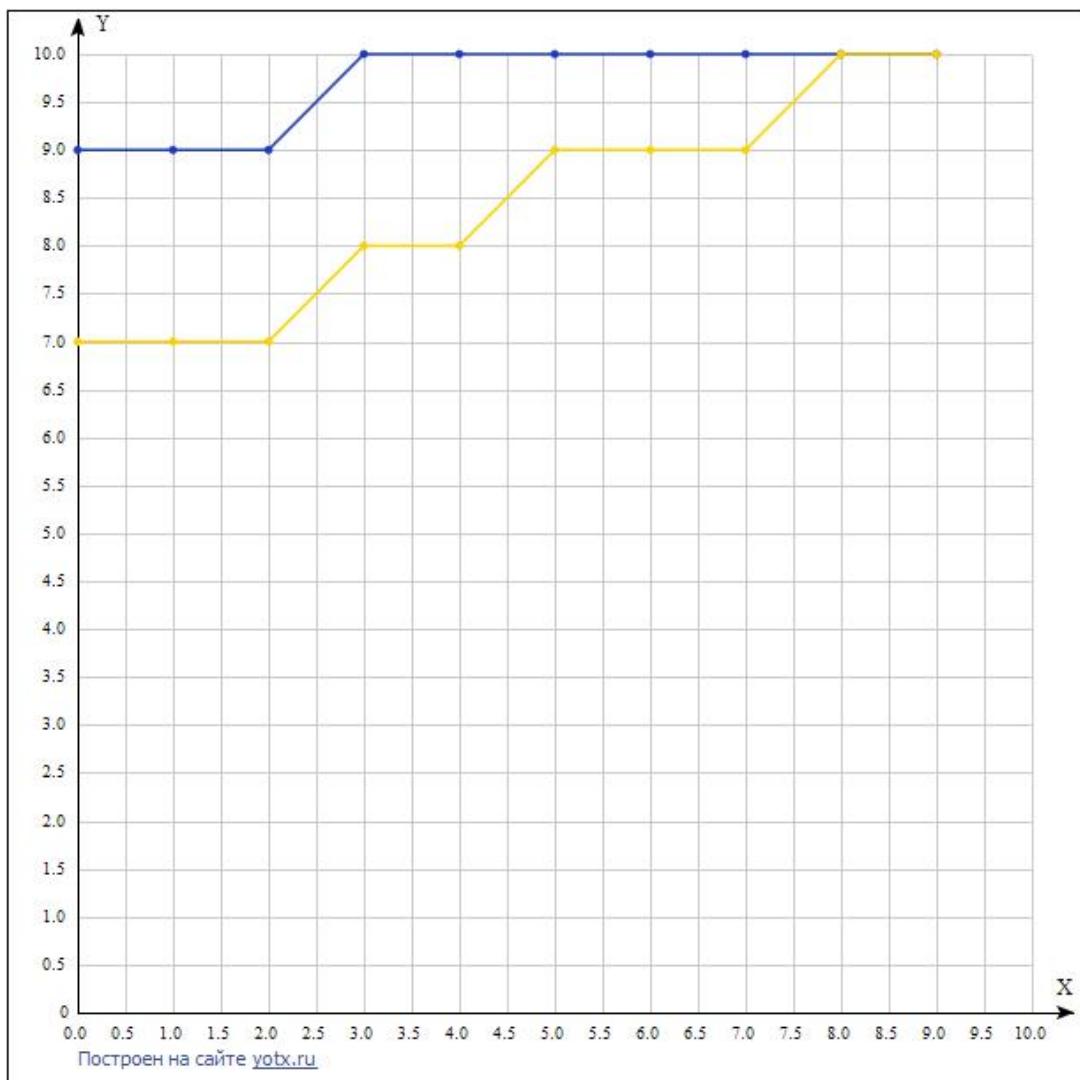


Blue line - best (largest number of ones)

Yellow line - average (per population)

As i can see, in this situation population achieve best result form initial population and average line was growing very fast.

Third experiment: 70% of ones and 30% of zeros



In this situation population evaluate smoothly and achieve best result.

Conclusion: if i choose 50% of ones and 50% of zeros, population can not achieve good result. 90% of ones and 10% of zeros allow population to achieve good result from initial population or very quickly. And 70% of ones and 30% of zeros lead to achieve good result smoothly.