

Basic data:

Population: 100 chromosomes, each has 30 gens.

0/1 generation: 50% for each.

Crossing over: Mutli points.

Scenarios:

1. Without mutations.
2. With mutations.

Chromosomes data about 5 first chromosomes on different steps:

First scenario:

Started population:

	chromosomes	fitness
0	110101101111100110111101011110	21
1	011111111011001110101111101100	21
2	111001111111111100110011110010	21
3	110100011101111011110101101111	21
4	110111111010010111111010110100	20

Middle population:

	chromosomes	fitness
0	111111111111101111111111111111	29
1	111111111011111111101111111011	27
2	11111111111101111111111011101	27
3	011111110111111111111111111101	27
4	111011101111111111111011111111	27

Final population:

	chromosomes	fitness
0	111111111111111111111111111111	30
1	111111111111111111111111111111	30
2	111111111111111111111111111111	30
3	111111111111111111111111111111	30
4	111111111111111111111111111111	30

Second scenario:

Started population:

	chromosomes	fitness
0	011111001011110111111101110110	22
1	110111110111101110100111101001	21
2	11010110110101101100111110111	21
3	011111010110010101001101111111	20
4	111011111110101111001001001101	20

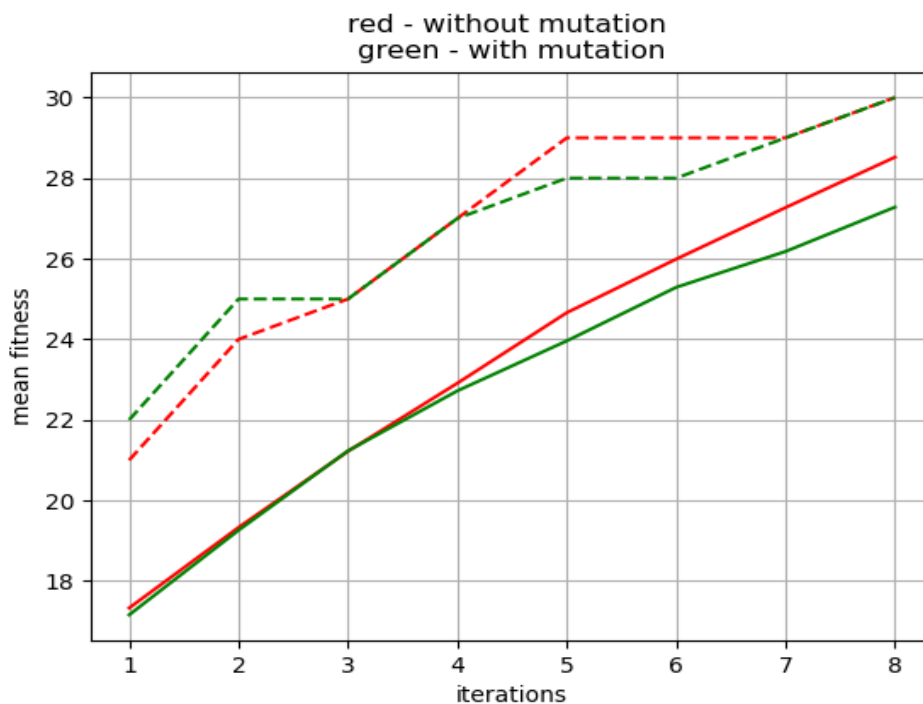
Middle population:

	chromosomes	fitness
0	11111101111111111111111110111	28
1	101111111111111111011101111111	27
2	11101011111111111111111110011	26
3	111111110111110111101011111111	26
4	111111111111110111110101111011	26

Final population:

	chromosomes	fitness
0	1111111111111111111111111111111	30
1	1111111111111111111111111111111	30
2	1111111111111111111111111111111	30
3	1111111011111111111111111111111	29
4	1111111111111110111111111111111	29

Graph:



Type of lines:

Dashed lines – maximal fitness values in populations.

The main lines – mean fitness values in populations.

Color of lines:

Red – population without mutation.

Green – population with mutation.