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Number of Generations	The number of generations helps with the convergence rate as it allows for more time to pass during the evolution of the population. This will allow for us to find the solution.
Population Size	Increasing the population size will increase the rate of convergence towards the solution. This increase in rate of convergence is massive when comparing a population of size 10 to a population of size 1000
Mutation Rate	As the mutation rate increases, the convergence rate appears to slow down. The development of the fitness over the generations tends to slow down and seem somewhat flat. Some of the example graphs display this.
Tournament Size	Increasing the tournament size showed that it helped to find a solution faster. Therefore, increasing the tournament size will increase the rate of convergence rate.

Examples of Different Graphs:

Where the Title has values ordered as: (Generations, Population, Mutation Rate, Tournament Size)

The different graphs will help to confirm the findings reported in the Table above

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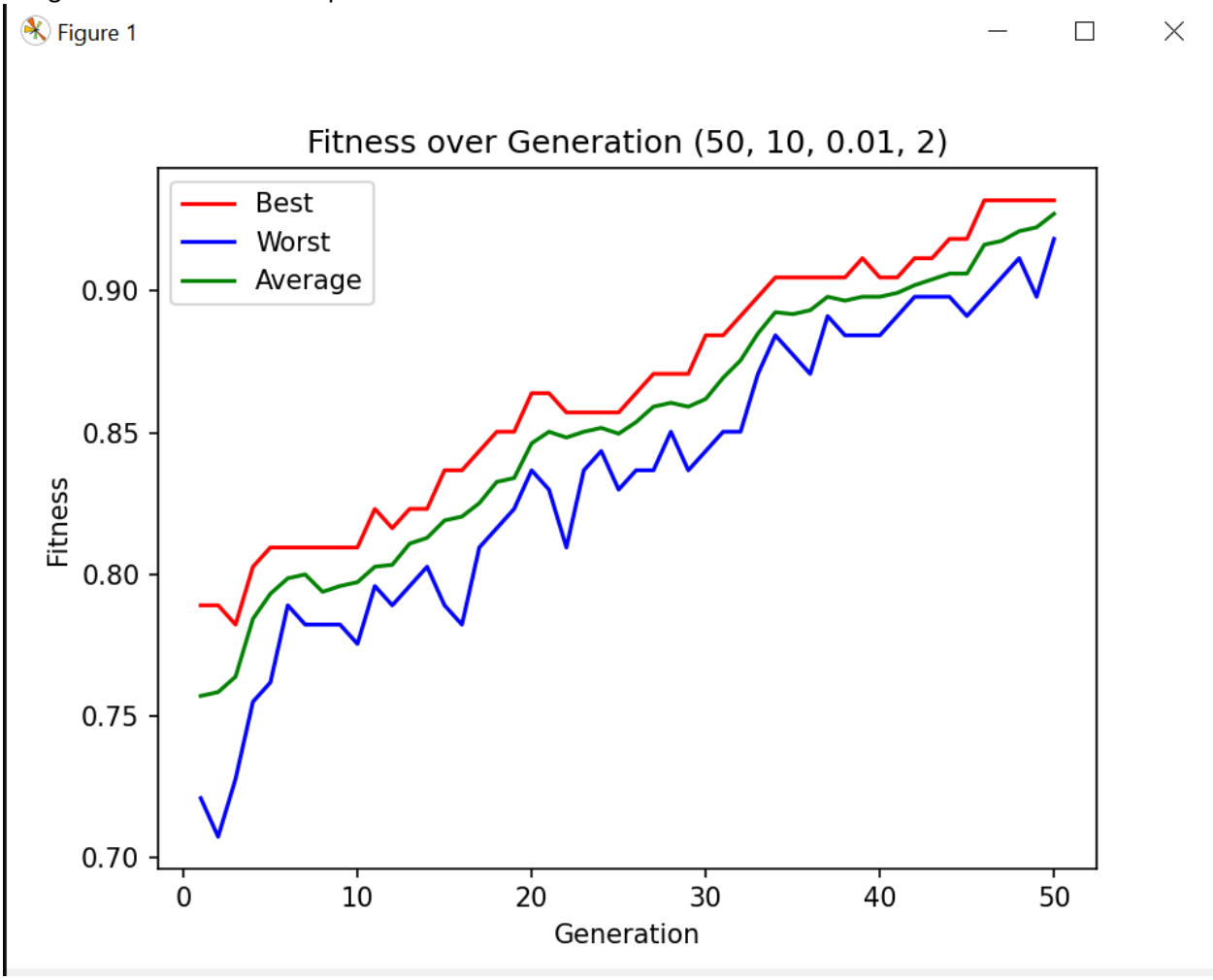

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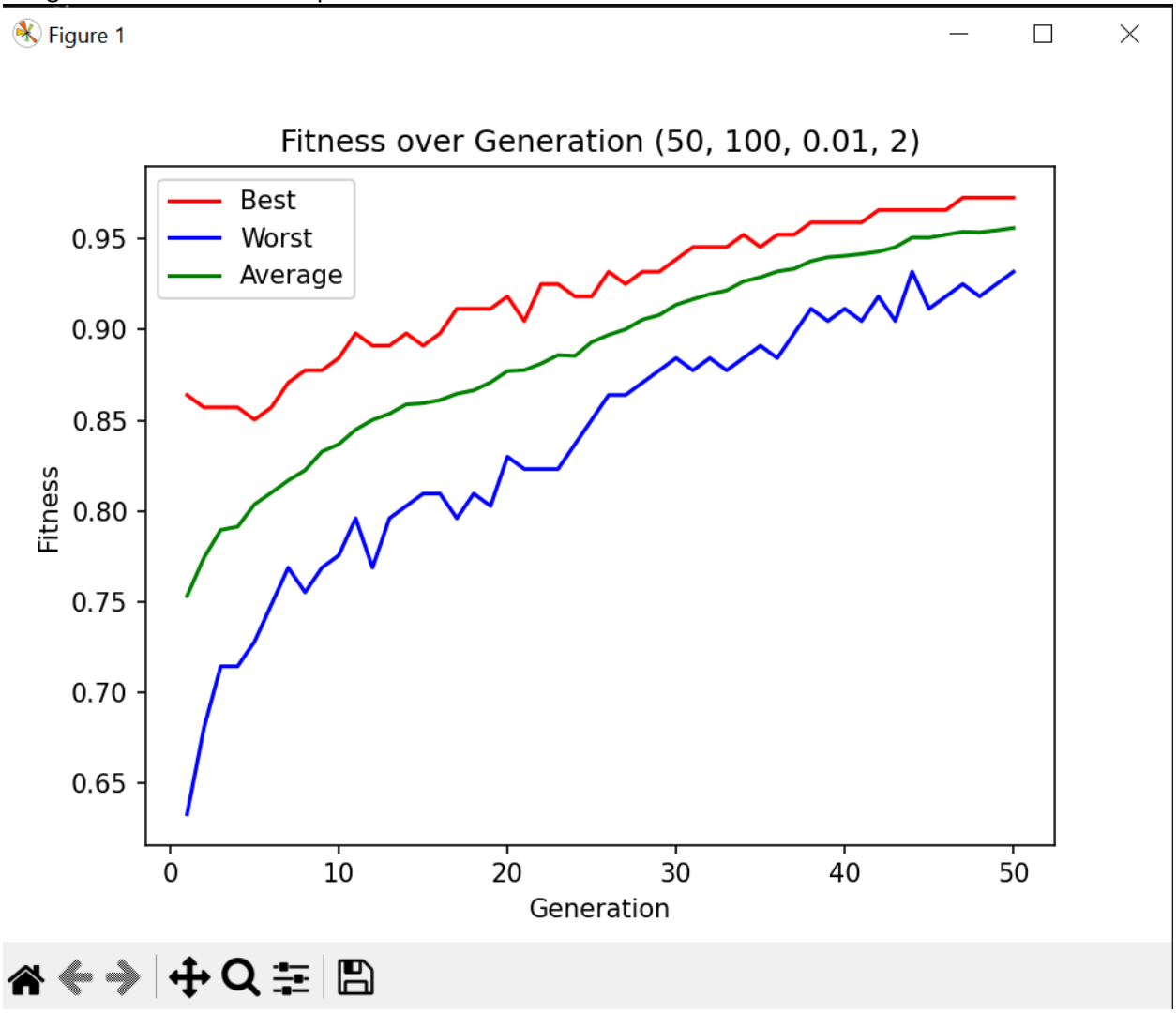

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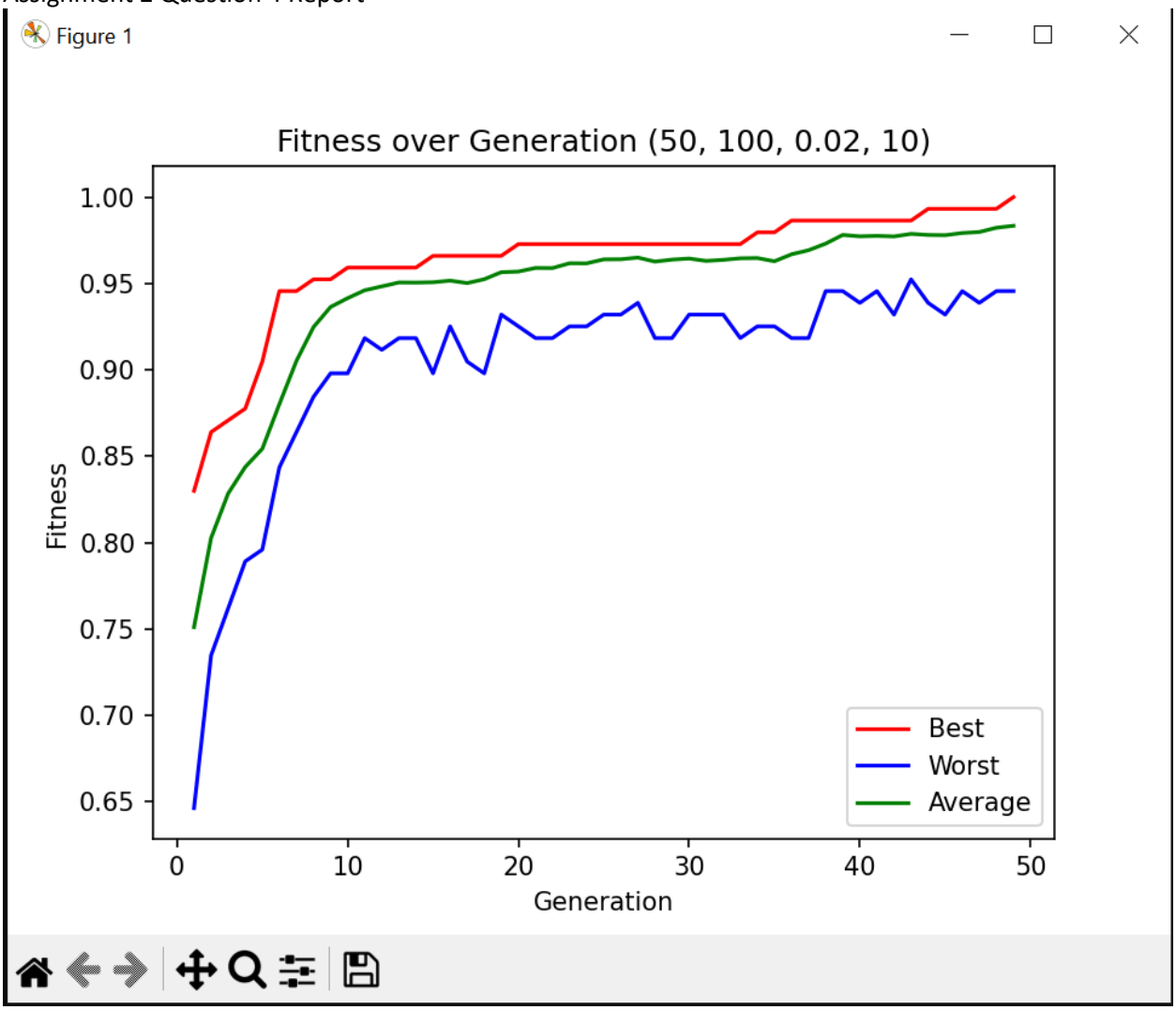

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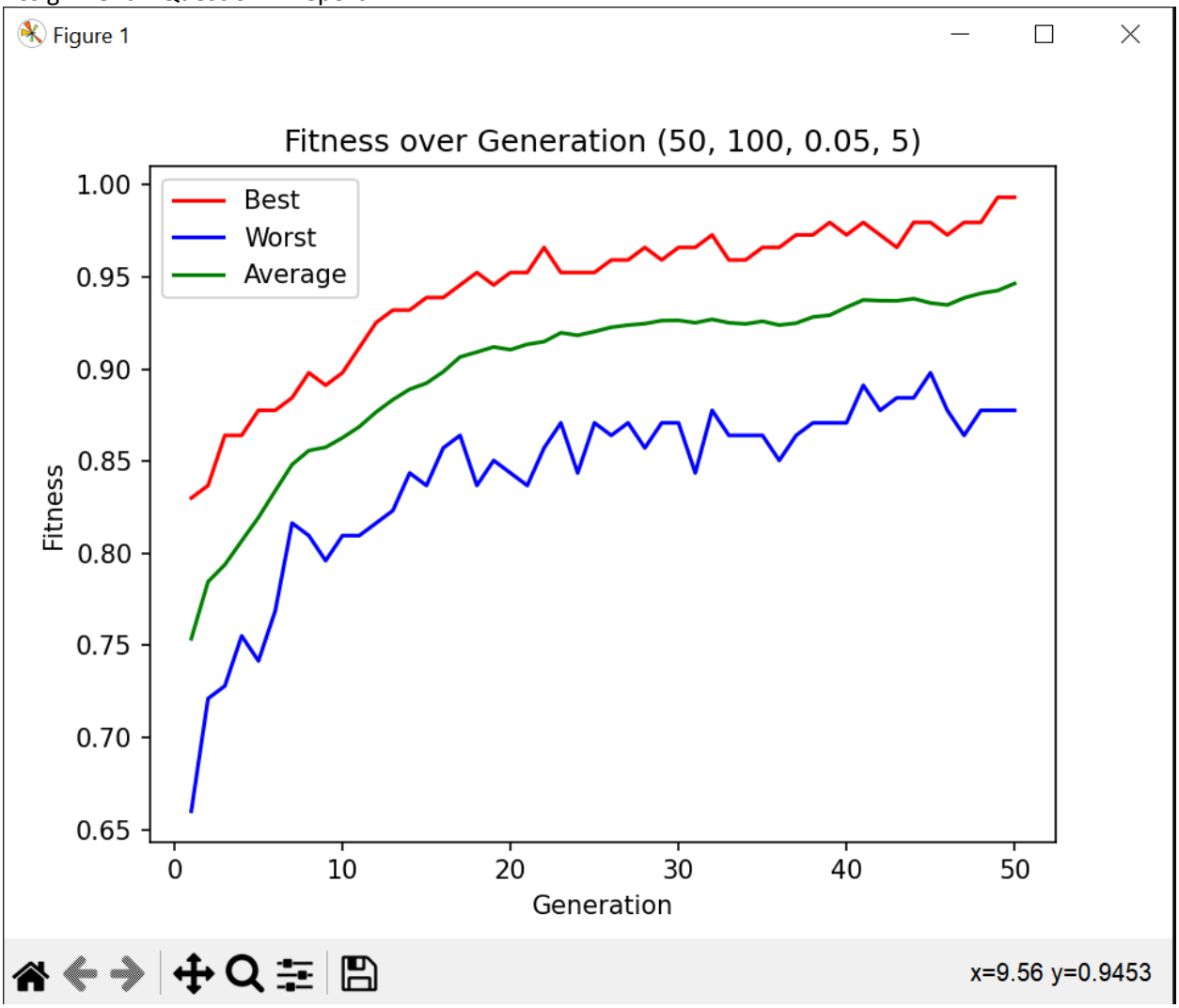

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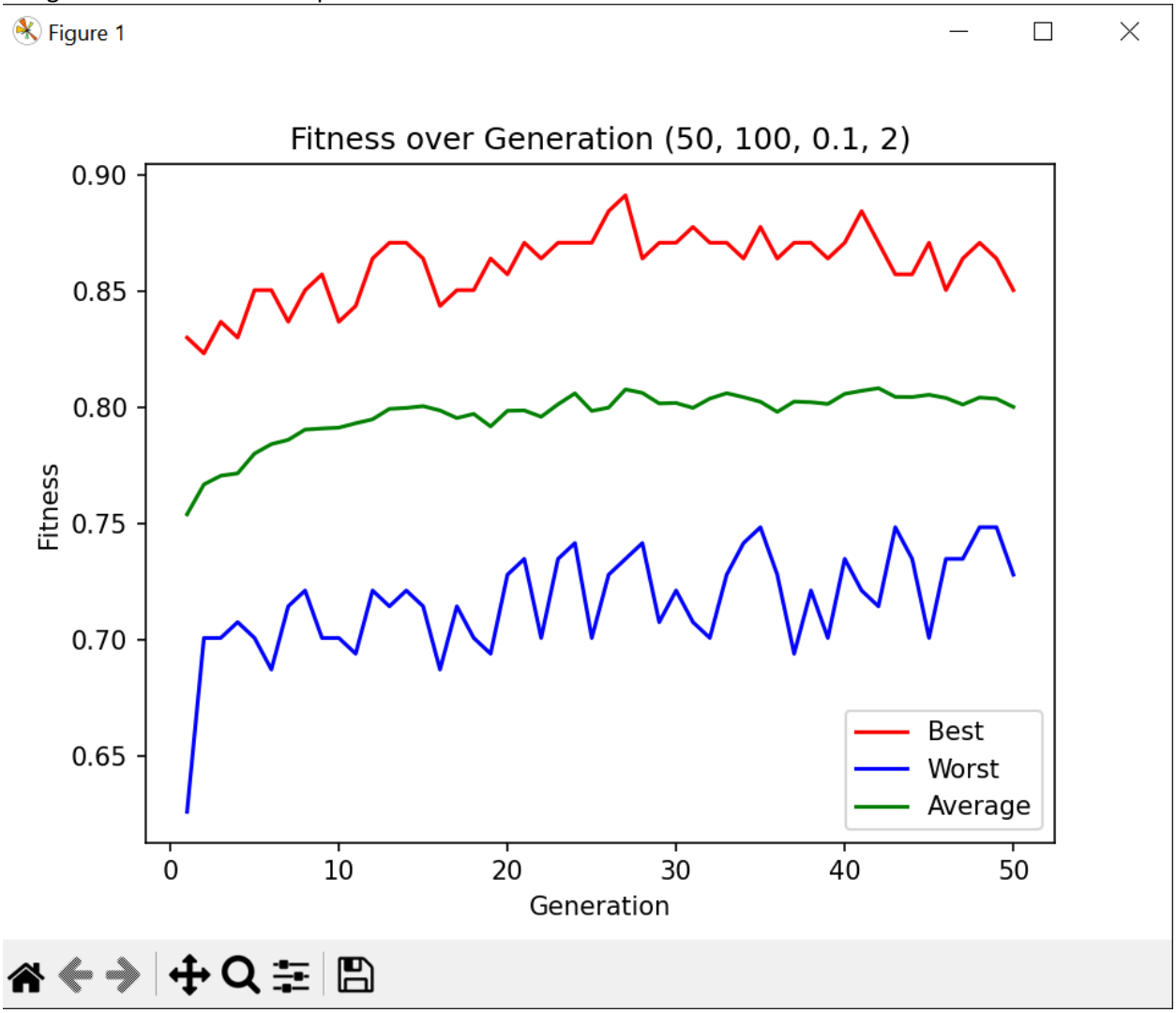

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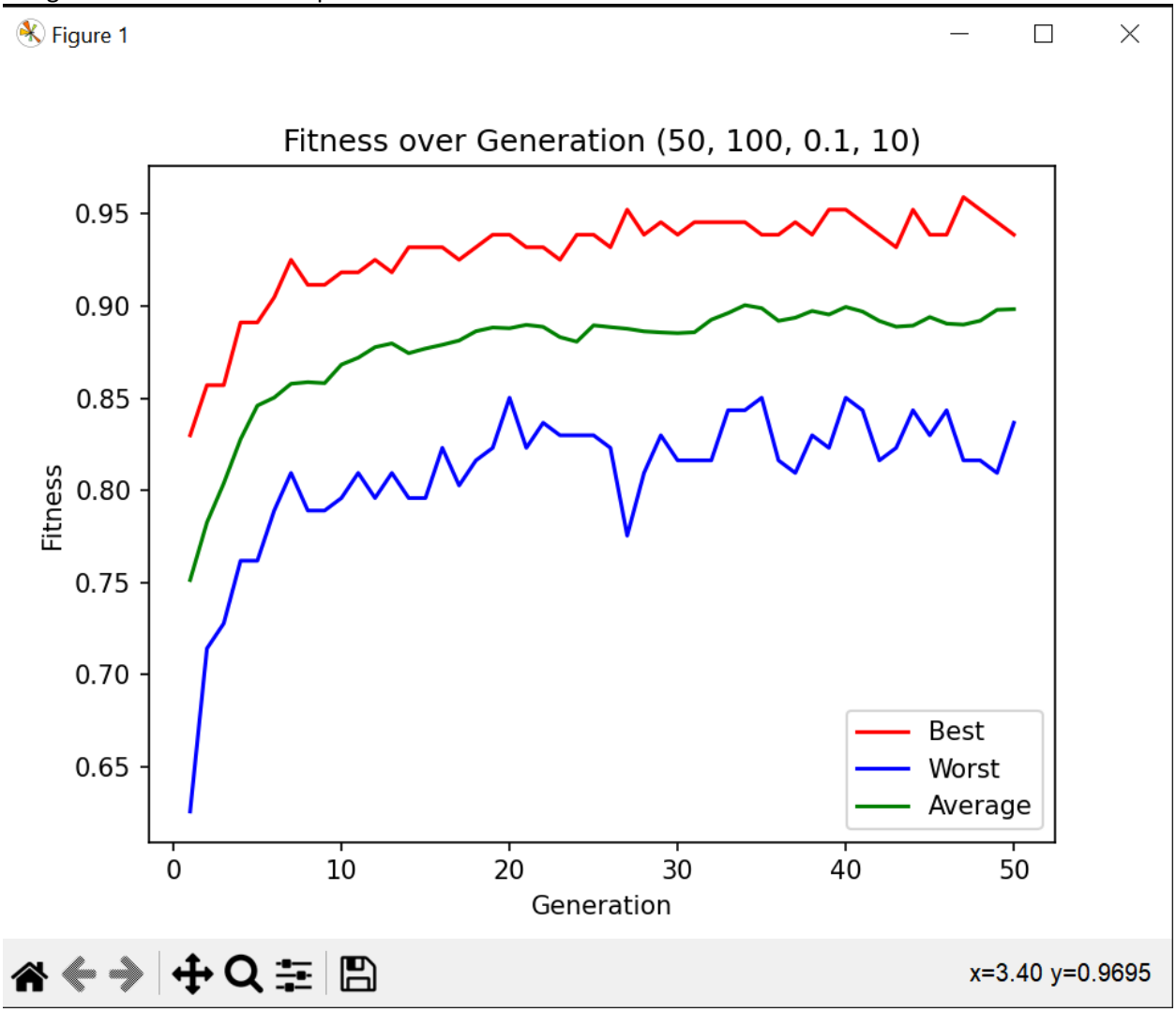

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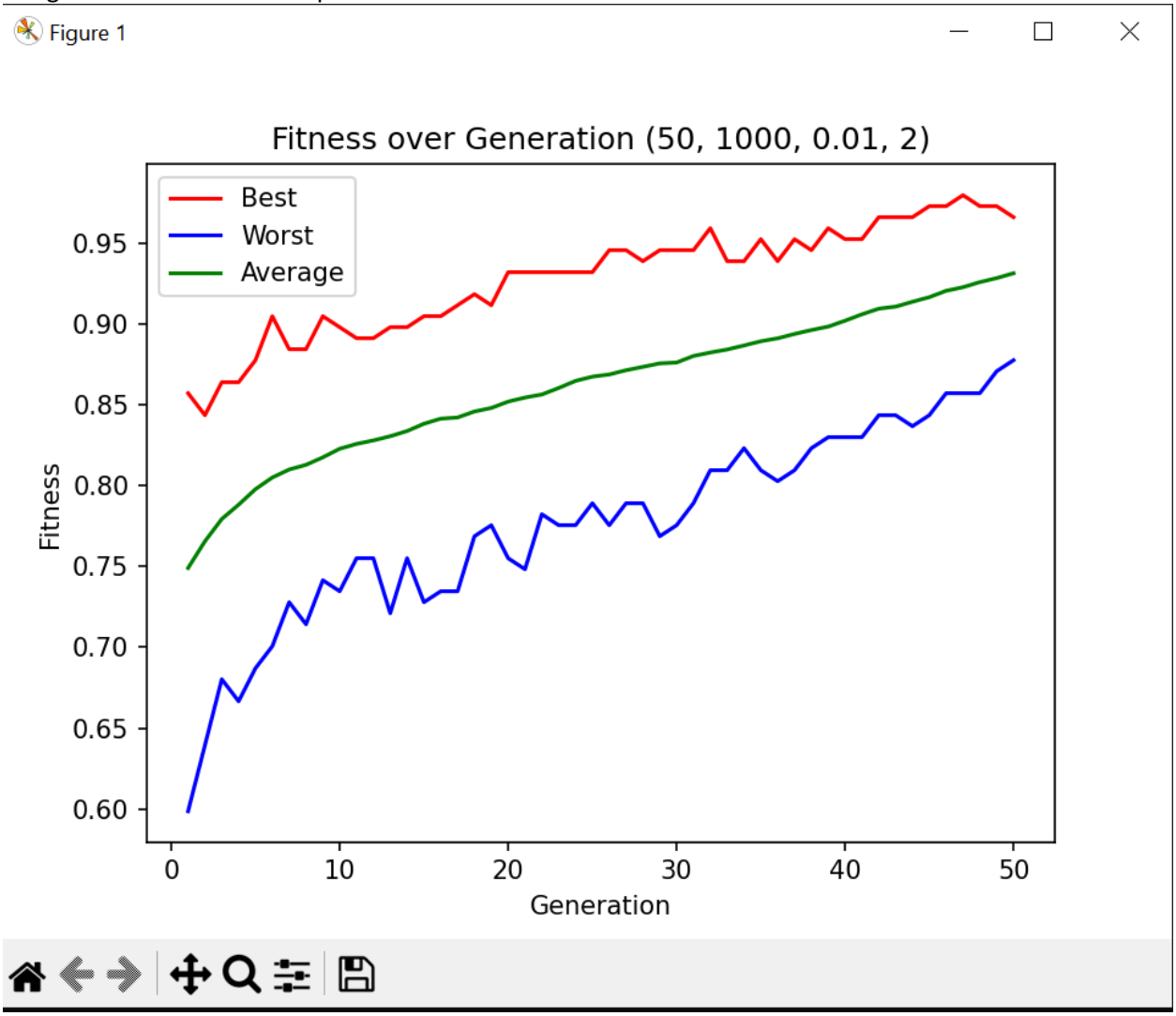

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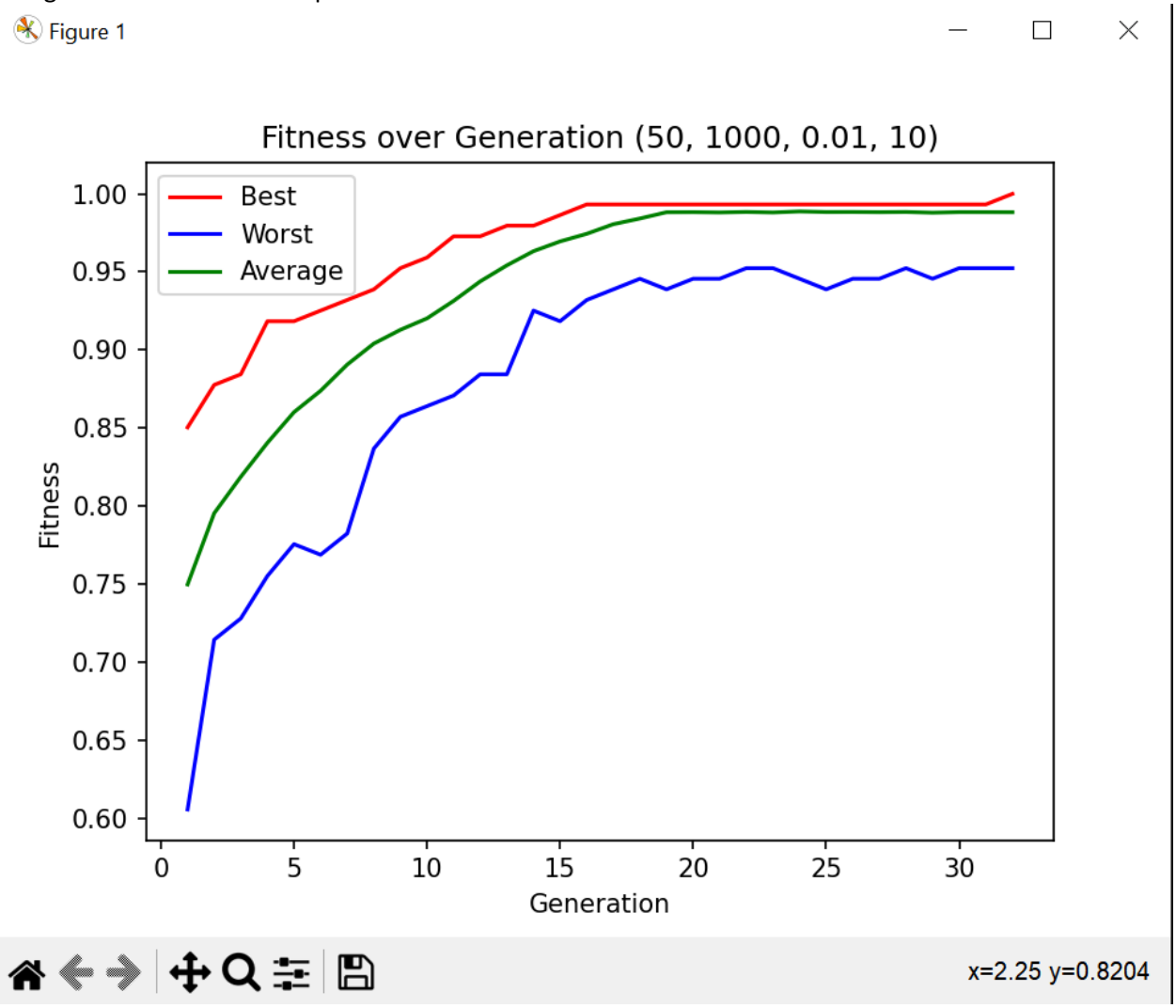

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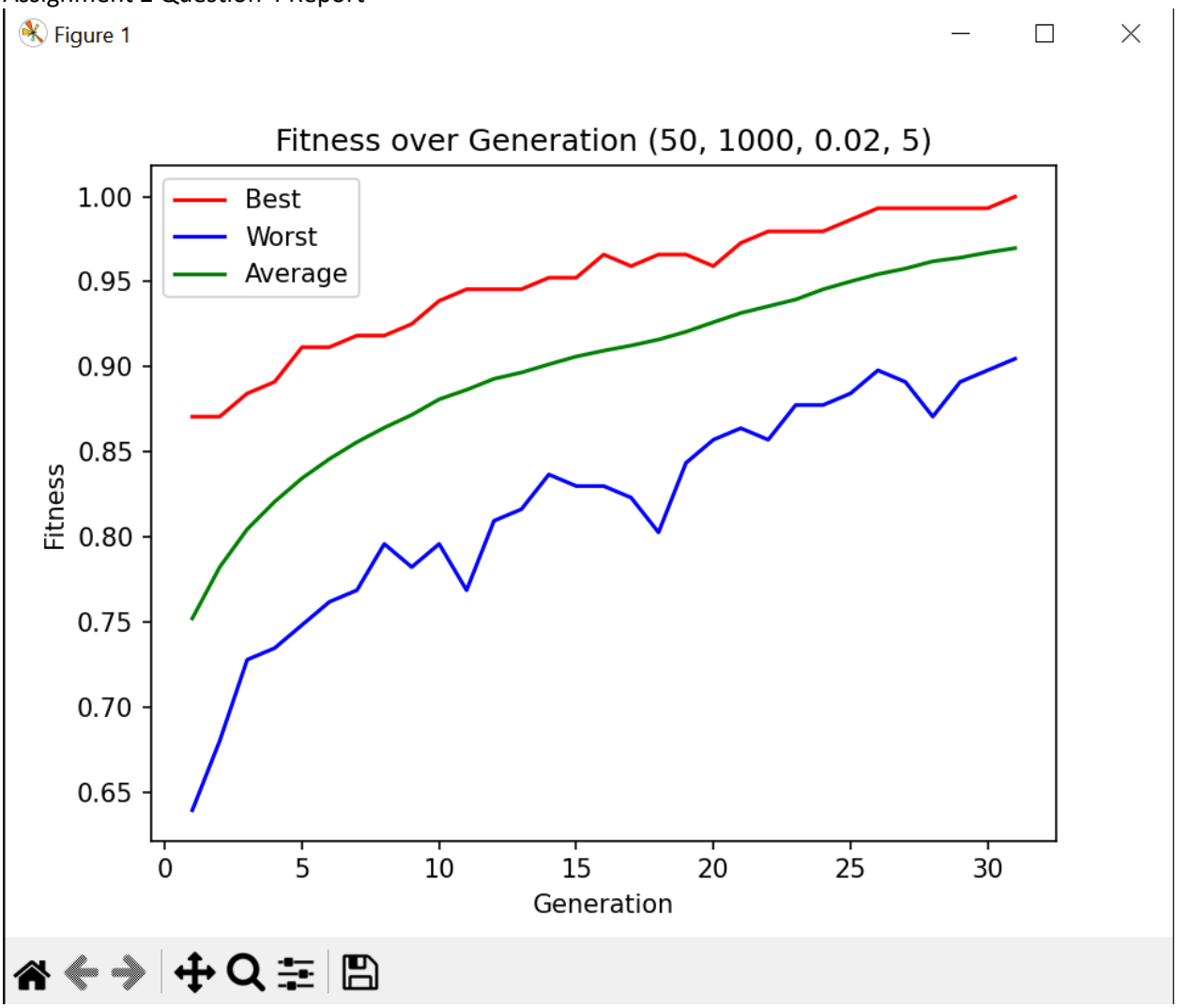

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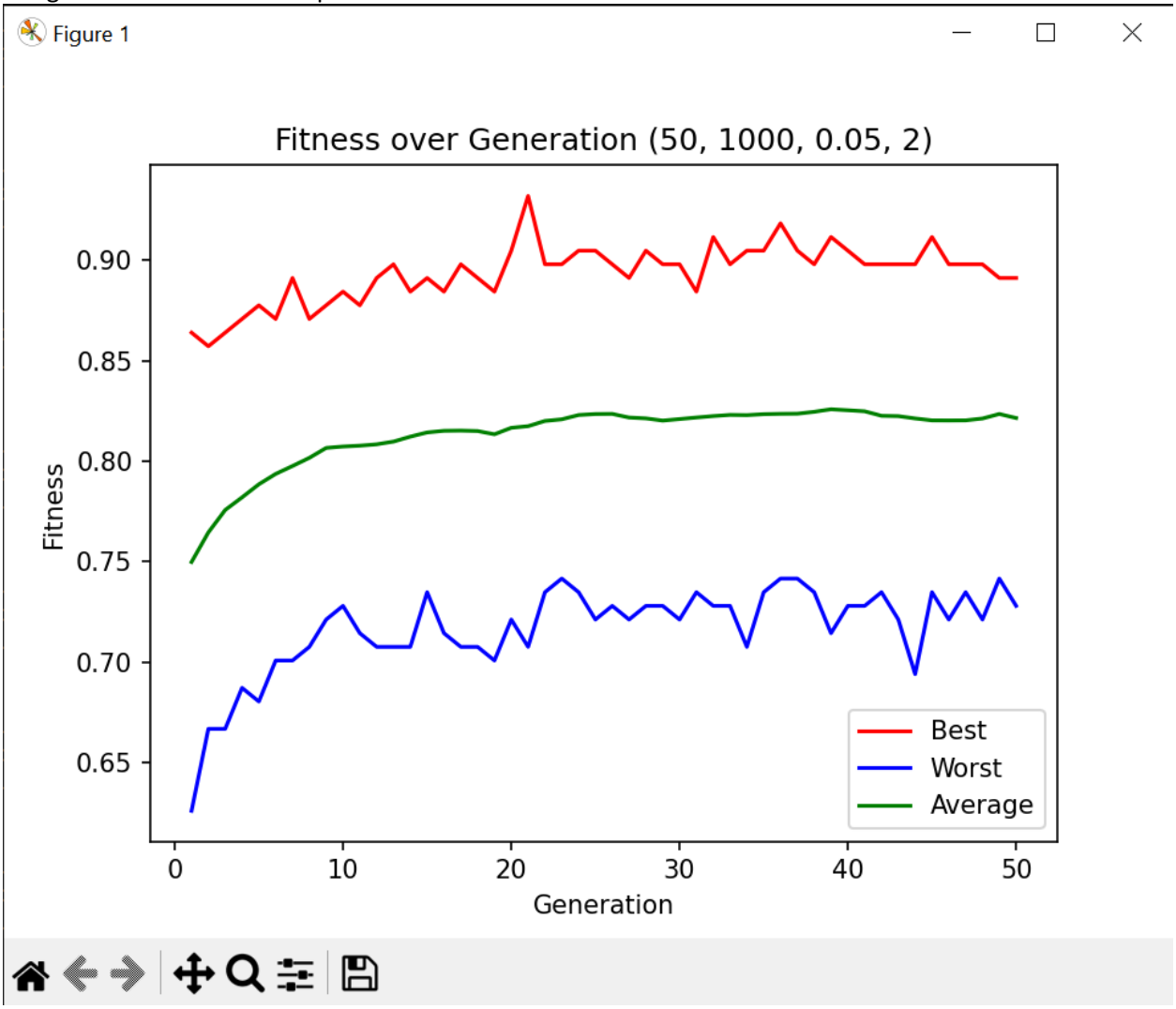

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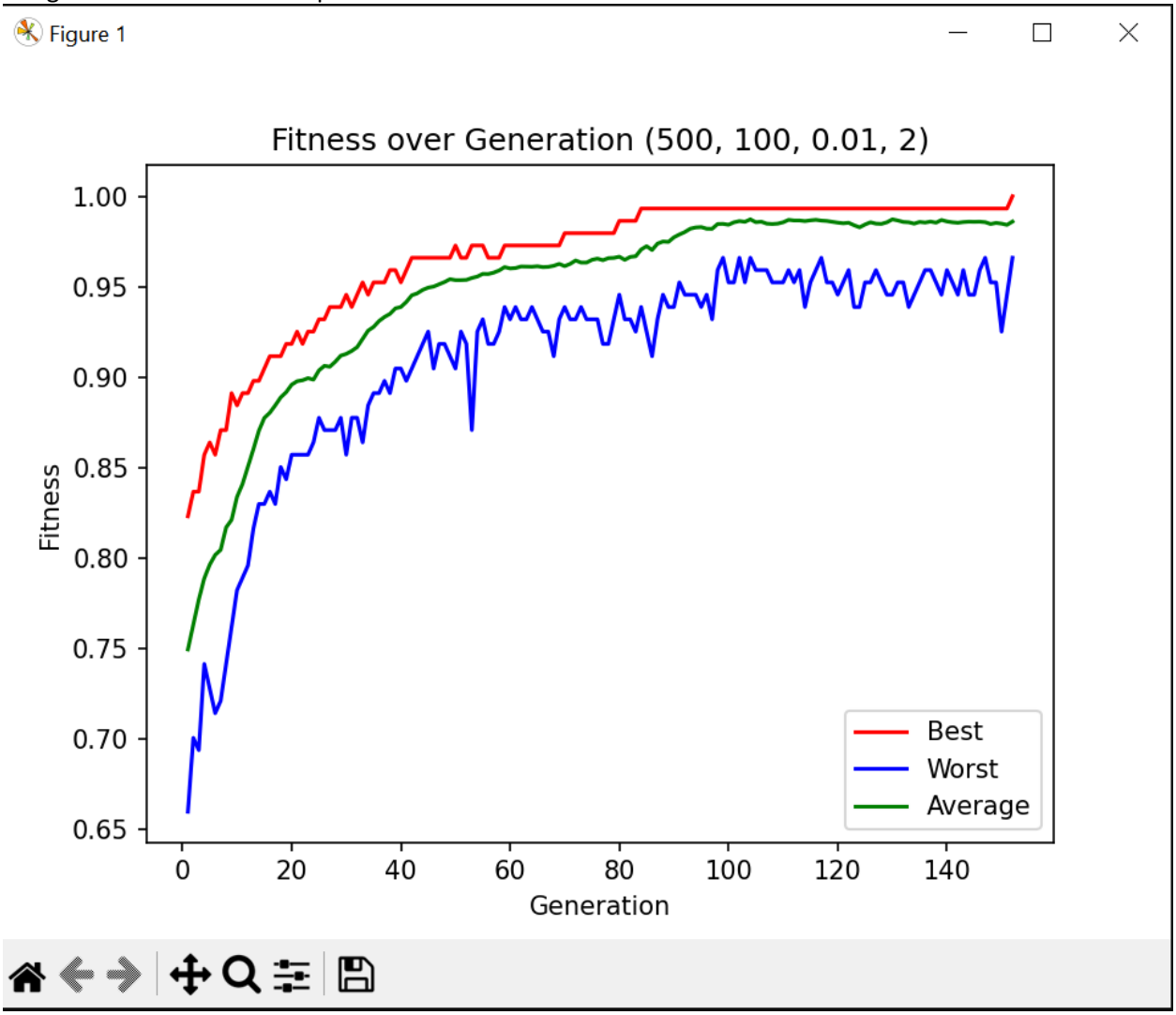

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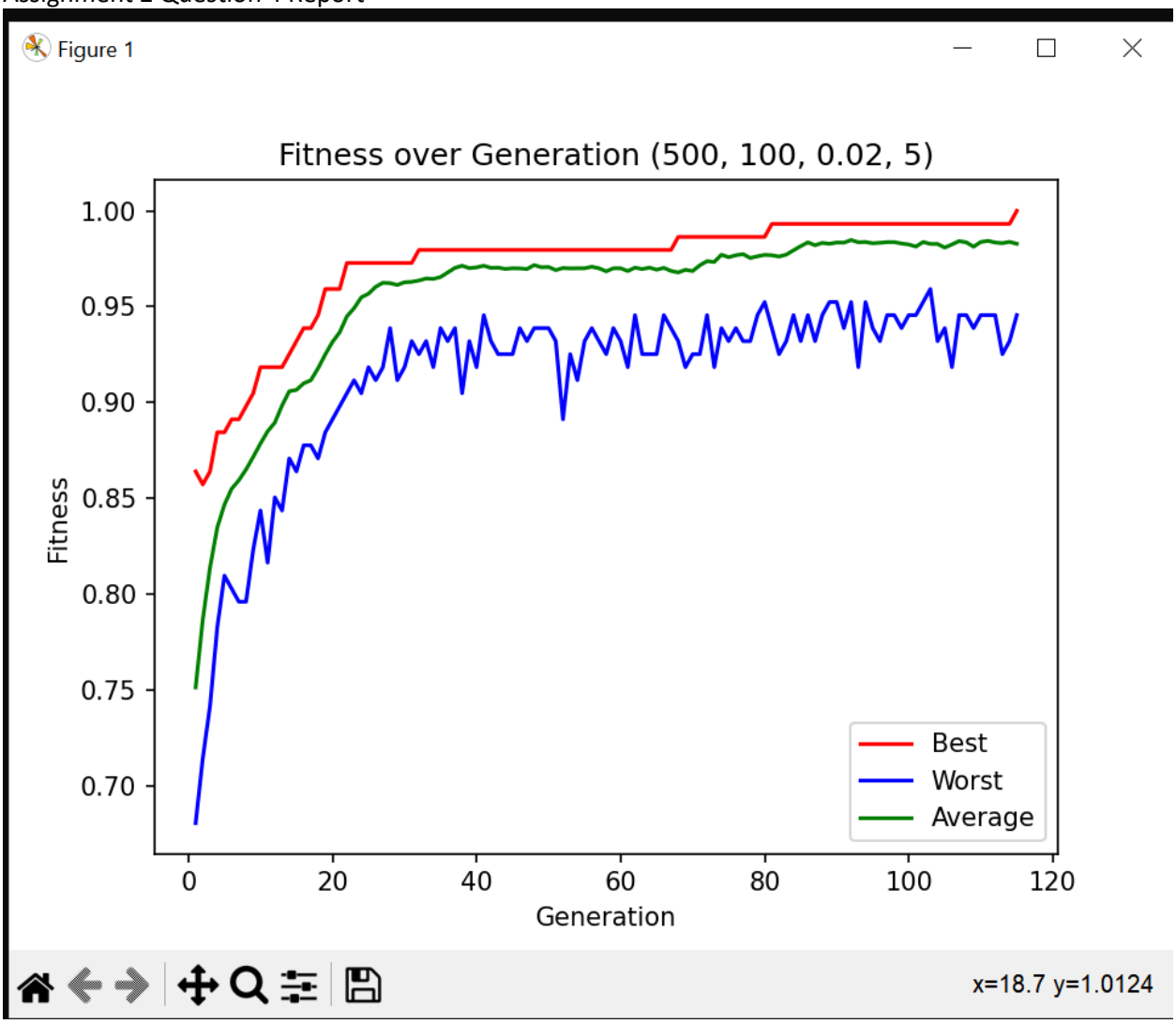

Here is a Sample of the Output when a solution is found:

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```
Generation #31:
Best fitness: 1.0
Worst fitness: 0.9047619047619048
Average fitness: 0.9697482993197336
Reached goal ...
Answer:
AB: 4
BC: 3
NT: 2
SK: 3
MT: 2
YT: 1
AK: 4
WA: 2
ID: 4
MB: 2
NU: 4
ON: 1
ND: 4
MN: 3
NB: 4
QC: 2
PE: 1
NS: 3
ME: 1
NL: 3
NY: 4
PA: 2
OH: 3
MI: 2
NH: 4
VT: 3
AL: 4
FL: 1
GA: 2
TN: 3
MS: 1
AZ: 4
NM: 1
UT: 2
NV: 3
```

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```
CA: 1
AR: 2
LA: 3
MO: 4
OK: 3
TX: 4
OR: 4
CO: 4
KS: 1
NE: 3
WY: 1
CT: 3
RI: 3
MA: 2
DE: 4
NJ: 3
MD: 3
DC: 1
VA: 2
SC: 3
NC: 4
HI: 2
IL: 3
WI: 4
IA: 1
KY: 1
IN: 4
SD: 4
WV: 4
```