Steps of evolutionairy algorithm (lecture F, [Files (vu.nl)](https://canvas.vu.nl/files/folder/courses_70677/Videos?preview=6606452))

A table with text on it

Description automatically generated

|  |  |  |  |
| --- | --- | --- | --- |
| Representation | Use the |  |  |
| Recombination | Uniform cross over |  |  |
| Recombination probability | 100 |  |  |
| Mutation | Swap |  |  |
| Mutation probability | 5 |  |  |
| Parent selection | Tournament algo |  |  |
| Survival selection | Replace worst |  |  |
| Number offspring | 2 |  |  |
| Initialisation | Random |  |  |
| Termination | Solution or 10000 iterations |  |  |
| Fitness function | Gamma \* (100-e(e) + alpha \* e(p) – log(t) |  |  |
| Amount of Niches | 4 |  |  |

* More kids
* Different crossover
* Eliteism
* Different mutation strategies
* Pervasion of incest (measure of similarity)
* Initiaize random (if we want to fix other variables or random if we want more variability)

Ideas of methods to use:

* Niching
* Lamarcism

When writing report, pay attention to:

* Evo algo effect on traversing the search space (diversity, variation, variance in solutions)