Single point crossover

Effect of population size:

|  |  |  |
| --- | --- | --- |
|  | 1. Test 1 | 1. Test 2 |
| Population | 10 | 100 |
| Generations | 10 | 10 |
| Elitism | 0.1 | 0.1 |
| Mutation (scramble) | 0.4 | 0.4 |

Effect of mutation rate

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. Test 1 | 1. Test 2 | 1. Test 3 |
| Population | 100 | 100 | 100 |
| Generations | 100 | 100 | 100 |
| Elitism | 0.1 | 0.1 | 0.1 |
| Mutation (scramble) | 0 | 0.4 | 1 |

Elitism

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. Test 1 | 1. Test 2 | 1. Test 3 |
| Population | 100 | 100 | 100 |
| Generations | 100 | 100 | 100 |
| Elitism | 0 | 0.1 | 0.5 |
| Mutation (scramble) | 0.4 | 0.4 | 0.4 |

Different mutations

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. Test 1 (swap) | 1. Test 2 (scramble) | 1. Test 3 (invert) |
| Population | 100 | 100 | 100 |
| Generations | 100 | 100 | 100 |
| Elitism | 0.1 | 0.1 | 0.1 |
| Mutation | 1 | 1 | 1 |

Two-point crossover

Effect of population size:

|  |  |  |
| --- | --- | --- |
|  | 1. Test 1 | 1. Test 2 |
| Population | 10 | 100 |
| Generations | 10 | 10 |
| Elitism | 0.1 | 0.1 |
| Mutation (scramble) | 0.4 | 0.4 |

Effect of mutation rate

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. Test 1 | 1. Test 2 | 1. Test 3 |
| Population | 100 | 100 | 100 |
| Generations | 100 | 100 | 100 |
| Elitism | 0.1 | 0.1 | 0.1 |
| Mutation (scramble) | 0 | 0.4 | 1 |

Elitism

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. Test 1 | 1. Test 2 | 1. Test 3 |
| Population | 100 | 100 | 100 |
| Generations | 100 | 100 | 100 |
| Elitism | 0 | 0.1 | 0.5 |
| Mutation (scramble) | 0.4 | 0.4 | 0.4 |

Different mutations

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. Test 1 (swap) | 1. Test 2 (scramble) | 1. Test 3 (invert) |
| Population | 100 | 100 | 100 |
| Generations | 100 | 100 | 100 |
| Elitism | 0.1 | 0.1 | 0.1 |
| Mutation | 1 | 1 | 1 |