

Skarubo Artyom AI-13

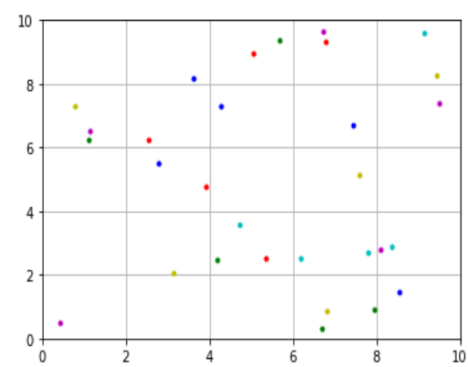
Multi-Dimension Reduction

1	red
2	green
3	blue
4	yellow
5	cyan
6	magenta

Parameters:

Population size	20
Chromosome size	60
Crossover	Uniform
Selection	Truncate

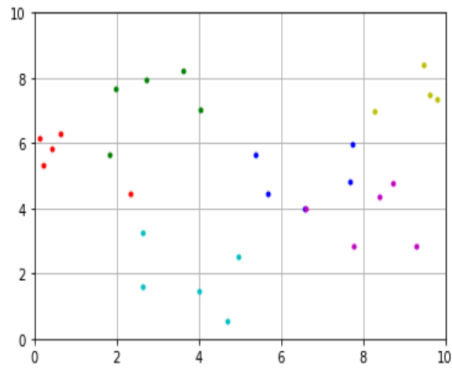
Initial generation:



```
print(arr)
```

```
[(6.79, 9.34), (2.53, 6.24), (5.04, 8.96), (3.91, 4.77), (5.36, 2.52), (5.69, 9.36), (7.94, 0.92), (6.7, 0.31), (4.18, 2.48), (1.12, 6.25), (4.27, 7.3), (3.63, 8.16), (7.43, 6.69), (2.77, 5.52), (8.54, 1.48), (3.14, 2.06), (7.59, 5.16), (6.83, 0.88), (9.43, 8.29), (0.77, 7.31), (4.72, 3.56), (9.15, 9.59), (6.2, 2.54), (8.36, 2.87), (7.81, 2.71), (1.14, 6.53), (0.43, 0.49), (6.73, 9.67), (8.1, 2.81), (9.51, 7.41)]
```

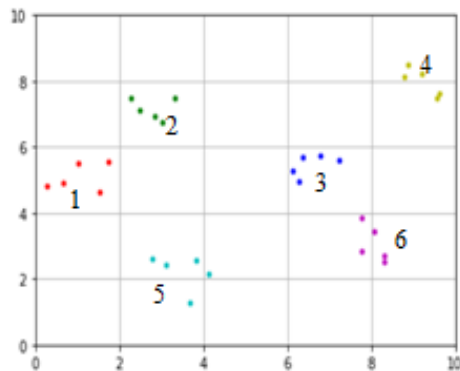
Middle generation:



```
print(arr)
```

```
[(2.33, 4.45), (0.12, 6.17), (0.64, 6.28), (0.21, 5.31), (0.41, 5.85), (1.83, 5.64), (1.97, 7.66), (2.72, 7.95), (3.63, 8.22), (4.05, 7.02), (5.69, 4.46), (7.74, 5.98), (5.38, 5.66), (7.69, 4.8), (6.58, 4.0), (10.15, 7.8), (9.61, 7.5), (9.47, 8.42), (8.27, 7.0), (9.79, 7.35), (4.69, 0.52), (2.62, 1.6), (2.62, 3.24), (4.01, 1.44), (4.95, 2.52), (9.3, 2.85), (7.78, 2.83), (6.6, 3.98), (8.74, 4.78), (8.41, 4.36)]
```

Last generation:



```
print(arr)
```

```
[(1.01, 5.53), (1.52, 4.64), (0.65, 4.9), (0.26, 4.84), (1.75, 5.55), (2.85, 6.92), (3.02, 6.73), (2.27, 7.5), (2.48, 7.14), (3.32, 7.47), (6.28, 4.95), (6.79, 5.76), (6.36, 5.71), (7.22, 5.6), (6.14, 5.27), (9.2, 8.22), (9.61, 7.64), (9.56, 7.5), (8.78, 8.11), (8.89, 8.51), (3.11, 2.45), (2.77, 2.59), (4.12, 2.13), (3.82, 2.55), (3.69, 1.29), (8.32, 2.69), (7.76, 3.87), (7.78, 2.83), (8.3, 2.52), (8.07, 3.42)]
```

Green – average fitness. Red – best fitness.

