

```
File - data_mining
/Users/meijiaojiao/opt/anaconda3/envs/RunToEnd/bin/python "/Users/meijiaojiao/Desktop/New Evolution/data_mining.py"
```

	iterations	mutation_rate	...	range_mutation	crossover_probability
0	10000	5.0	...	0.01	0.4
1	10000	5.0	...	0.01	1.0
2	10000	5.0	...	0.25	0.4
3	10000	5.0	...	0.25	1.0
4	10000	5.0	...	0.55	0.4
..
571	10000	10.0	...	0.25	1.0
572	10000	10.0	...	0.55	0.4
573	10000	10.0	...	0.55	1.0
574	10000	10.0	...	0.90	0.4
575	10000	10.0	...	0.90	1.0

[576 rows x 7 columns]

This is the result for Badlwin(F1)

	Baldwin1	Baldwin2	...	Baldwin575	Baldwin576
F1 Times1	108787.589180	95127.269984	...	43677.952995	4881.375344
Times2	105950.207968	88631.742290	...	38029.933576	6389.027587
Times3	123765.717248	85792.369636	...	46655.887425	5379.575112
Times4	76608.317764	106548.212872	...	39076.176981	6590.957399
Times5	113341.506001	94535.440002	...	48377.837958	9328.238566
Times6	97452.574824	98794.089177	...	43978.524018	6446.041840
Times7	104898.671072	79095.137234	...	22774.107501	11560.905419

[7 rows x 576 columns]

This is the result:max_min_std_mean for Badlwin(F1)

	0	1	...	574	575
Max	123765.717248	106548.212872	...	48377.837958	11560.905419
Min	76608.317764	79095.137234	...	22774.107501	4881.375344
Std	17453.714693	10394.668792	...	10048.953794	2685.158957
Mean	94863.233376	84456.228009	...	36377.131971	6970.356099

[4 rows x 576 columns]

This is min index for the four rows

Max 511
Min 319
Std 511
Mean 511
dtype: int64

This is min value for the four rows

Max 8.161014
Min 3.406007
Std 1.103497
Mean 6.206574
dtype: float64

This is min combiantion for the four rows

['iterations', 'mutation_rate', 'local_search', 'num_individuals', 'm_range', 'range_mutation', 'crossover_probability']
[10000.0, 10.0, 5.0, 50.0, 1.2, 0.9, 1.0]
[10000.0, 10.0, 0.01, 50.0, 1.2, 0.9, 1.0]
[10000.0, 10.0, 5.0, 50.0, 1.2, 0.9, 1.0]
[10000.0, 10.0, 5.0, 50.0, 1.2, 0.9, 1.0]

This is max index for the four rows

Max 96
Min 96
Std 0
Mean 96
dtype: int64

This is max value for the four rows

Max 126912.618703
Min 100841.317442
Std 17453.714693

File - data_mining

Mean 102773.559406

dtype: float64

This is max combiantion for the four rows

[10000.0, 5.0, 1.0, 50.0, 0.05, 0.01, 0.4]

[10000.0, 5.0, 1.0, 50.0, 0.05, 0.01, 0.4]

[10000.0, 5.0, 0.01, 50.0, 0.05, 0.01, 0.4]

[10000.0, 5.0, 1.0, 50.0, 0.05, 0.01, 0.4]

Process finished with exit code 0