\*\*\* Python 2.7.3 (default, Apr 10 2012, 23:24:47) [MSC v.1500 64 bit (AMD64)] on win32. \*\*\*

\*\*\* Remote Python engine is active \*\*\*

>>>

\*\*\* Remote Interpreter Reinitialized \*\*\*

>>>

simulation timestep: 59

start to Optimization:

get overall vehicles:

[23, 1, 0, 20, 0, 1]

get HGV vehicles:

veh\_Position 491.737294791

veh\_Position 733.694856992

veh\_Position 337.942744509

veh\_Position 150.991444296

veh\_Position 574.253350918

veh\_Position 29.074377749

[[0.541269675372056, 0.8075994667747403, 0.3719834992234899, 0.16620071510504453], [0.6453134009230755, 0.03267213949195889]]

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all fitness value:

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the best Individual is:

[0, 3, 0, 0, 0, 0]

the best fitness value is:

-**221.3**

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start GA:

overallFitness: [-2752.6, -2142.9999999999995, -1837.5999999999992, -1837.5999999999992, -1837.5999999999992, -1837.5999999999992, -1827.999999999999, -1789.5999999999992, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, -1770.3999999999994, **-1770.3999999999994]**

**9**

The best genome is: [1, 0, 0, 1, 1, 1, 1, 1, 1, 0, 0, 1]

fittest signal programms: [2, 1, 3, 3, 2, 1]

the best fitness value:

0

the signal programm of Intersection 0 has changed to No. 3

the signal programm of Intersection 1 has changed to No. 4

simulation timestep: 119

start to Optimization:

get overall vehicles:

[31, 0, 1, 12, 0, 0]

get HGV vehicles:

veh\_Position 585.524514408

veh\_Position 481.313029677

veh\_Position 708.527718987

veh\_Position 733.194416753

veh\_Position 242.834518782

veh\_Position 829.282327325

veh\_Position 478.269250168

veh\_Position 320.651777121

[[0.6445040211377927, 0.529795380756208, 0.7798972591892293], [0.8239223712945607, 0.2728836826569608, 0.9319005245957379, 0.5374519032222005, 0.36033031148213646]]

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the best Individual is:

[0, 0, 0, 0, 3, 0]

the best fitness value is:

**-177.1**

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start GA:

overallFitness: [-1831.0000000000005, -1747.5000000000005, -1672.8000000000002, -1605.5000000000002, -1579.5999999999997, -1542.3999999999999, -1542.3999999999999, -1542.3999999999999, -1542.3999999999999, -1463.8999999999996, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, -1416.7999999999995, **-1416.7999999999995]**

**11**

The best genome is: [0, 1, 1, 1, 0, 0, 0, 1, 0, 0, 1, 1]

fittest signal programms: [1, 3, 0, 1, 0, 3]

the best fitness value:

0

the signal programm of Intersection 0 has changed to No. 2

the signal programm of Intersection 1 has changed to No. 2

simulation timestep: 179

start to Optimization:

get overall vehicles:

[19, 1, 0, 30, 0, 2]

get HGV vehicles:

veh\_Position 600.196124221

veh\_Position 332.861604967

veh\_Position 786.85014344

veh\_Position 619.352052291

veh\_Position 428.563330382

veh\_Position 591.360604336

[[0.6606534927451845, 0.366390539771544], [0.8842176389009685, 0.6959927679892688, 0.48159520496962077, 0.6645375636828698]]

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the best Individual is:

[3, 2, 0, 0, 1, 0]

the best fitness value is:

**-182.1**

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start GA:

overallFitness: [-1637.4000000000003, -1527.6000000000004, -1480.8000000000004, -1477.8000000000002, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, -1477.7999999999995, **-1477.7999999999995]**

The best genome is: [1, 0, 1, 0, 0, 1, 1, 1, 0, 0, 0, 0]

fittest signal programms: [2, 2, 1, 3, 0, 0]

the best fitness value:

0

the signal programm of Intersection 0 has changed to No. 3

the signal programm of Intersection 1 has changed to No. 4

simulation timestep: 239

start to Optimization:

get overall vehicles:

[17, 1, 0, 24, 0, 1]

get HGV vehicles:

veh\_Position 665.258765668

veh\_Position 877.242625653

veh\_Position 70.1319322161

veh\_Position 552.006661419

veh\_Position 241.499145267

[[0.7322698521059569, 0.9656067095988344], [0.07881029447943749, 0.6203138308948077, 0.2713830655116455]]

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the best Individual is:

[0, 0, 0, 0, 2, 0]

the best fitness value is:

**-184.2**

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start GA:

overallFitness: [-1583.0999999999988, -1524.599999999999, -1520.0999999999992, -1502.1, -1497.6000000000001, -1491.6, -1476.599999999999, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -1473.5999999999988, -**1473.5999999999988]**

**7**

The best genome is: [0, 0, 0, 0, 1, 1, 0, 0, 1, 0, 1, 1]

fittest signal programms: [0, 0, 3, 0, 2, 3]

the best fitness value:

0

the signal programm of Intersection 0 has changed to No. 1

the signal programm of Intersection 1 has changed to No. 1

simulation timestep: 299

start to Optimization:

get overall vehicles:

[21, 0, 1, 21, 0, 0]

get HGV vehicles:

veh\_Position 356.219402943

veh\_Position 492.991444488

veh\_Position 121.372396036

veh\_Position 761.591085119

veh\_Position 111.616625522

veh\_Position 38.4660893434

[[0.3921011536744503, 0.5426501547593612, 0.13359815921514517], [0.8558329393547313, 0.12542844390923902, 0.04322601321294832]]

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the best Individual is:

[0, 3, 0, 0, 0, 0]

the best fitness value is:

**-159.1**

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start GA:

overallFitness: [-1724.6, -1677.2, -1677.2, -1677.2, -1668.1999999999998, -1589.8999999999999, -1565.8999999999999, -1519.7, -1516.6999999999998, -1473.5, -1343.9000000000003, -1278.8000000000004, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, -1272.8000000000002, **-1272.8000000000002]**

**12**

The best genome is: [0, 1, 1, 1, 0, 0, 0, 0, 1, 0, 1, 0]

fittest signal programms: [1, 3, 0, 0, 2, 2]

the best fitness value:

0

the signal programm of Intersection 0 has changed to No. 2

the signal programm of Intersection 1 has changed to No. 1

simulation timestep: 359

start to Optimization:

get overall vehicles:

[0, 0, 0, 0, 0, 0]

get HGV vehicles:

[[], []]

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