

```

Loading start genome for XOR experiment
INFO: 13:51:15 genome_reader.go:106: /* The XOR experiment start genome */
GENOME START
Nodes:
    B(SENSOR id:001, BIAS, SigmoidSteepenedActivation, inactive -> step: 0 = 0.000 [])
    I(SENSOR id:002, INPT, SigmoidSteepenedActivation, inactive -> step: 0 = 0.000 [])
    I(SENSOR id:003, INPT, SigmoidSteepenedActivation, inactive -> step: 0 = 0.000 [])
    O(NEURON id:004, OUTP, SigmoidSteepenedActivation, inactive -> step: 0 = 0.000 [])
Genes:
    [Link ( 1 -> 4) INNOV ( 1, 0.000) Weight: 0.000 Link's trait_id: 1 : (SENSOR id:001,
    BIAS, SigmoidSteepenedActivation, inactive -> step: 0 = 0.000 [])->(NEURON id:004, OUTP,
    SigmoidSteepenedActivation, inactive -> step: 0 = 0.000 [])]
    [Link ( 2 -> 4) INNOV ( 2, 0.000) Weight: 0.000 Link's trait_id: 2 : (SENSOR id:002,
    INPT, SigmoidSteepenedActivation, inactive -> step: 0 = 0.000 [])->(NEURON id:004, OUTP,
    SigmoidSteepenedActivation, inactive -> step: 0 = 0.000 [])]
    [Link ( 3 -> 4) INNOV ( 3, 0.000) Weight: 0.000 Link's trait_id: 3 : (SENSOR id:003,
    INPT, SigmoidSteepenedActivation, inactive -> step: 0 = 0.000 [])->(NEURON id:004, OUTP,
    SigmoidSteepenedActivation, inactive -> step: 0 = 0.000 [])]
Traits:
    Trait #1 ( 0.100000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 )
    Trait #2 ( 0.200000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 )
    Trait #3 ( 0.300000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 )
GENOME END
INFO: 13:51:15 common.go:60:
>>>> Spawning new population
INFO: 13:51:15 common.go:66: OK <<<<
INFO: 13:51:15 common.go:68: >>>> Verifying spawned population
INFO: 13:51:15 common.go:74: OK <<<<
INFO: 13:51:15 common.go:95: >>>> Generation: 0 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 1 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 2 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 3 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 4 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 5 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 6 Run: 0

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[illegible]

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INFO: 13:51:15 common.go:95: >>>> Generation: 42 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 43 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 44 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 45 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 46 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 47 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 48 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 49 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 50 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 51 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 52 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 53 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 54 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 55 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 56 Run: 0
INFO: 13:51:15 common.go:95: >>>> Generation: 57 Run: 0
INFO: 13:51:15 XOR.go:162: >>>> Output activations: [1.781074e-29 1.000000e+00 9.899151e-01 4.047139e-06]
INFO: 13:51:15 XOR.go:90: Generation #57 winner dumped to: ./out/xor/0/xor_winner_9-19
INFO: 13:51:15 common.go:124: >>>> The winner organism found in [57] generation, fitness: 15.919390
<<<<<
INFO: 13:51:15 common.go:60:
>>>> Spawning new population
INFO: 13:51:15 common.go:66: OK <<<<<
INFO: 13:51:15 common.go:68: >>>> Verifying spawned population
INFO: 13:51:15 common.go:74: OK <<<<<
INFO: 13:51:15 common.go:95: >>>> Generation: 0 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 1 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 2 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 3 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 4 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 5 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 6 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 7 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 8 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 9 Run: 1
```

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INFO: 13:51:15 common.go:95: >>>> Generation: 10 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 11 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 12 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 13 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 14 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 15 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 16 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 17 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 18 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 19 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 20 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 21 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 22 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 23 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 24 Run: 1
INFO: 13:51:15 common.go:95: >>>> Generation: 25 Run: 1
INFO: 13:51:15 XOR.go:162: >>>> Output activations: [8.087672e-04 9.999295e-01 9.982497e-01 3.504062e-03]
INFO: 13:51:15 XOR.go:90: Generation #25 winner dumped to: ./out/xor/1/xor_winner_8-13
INFO: 13:51:15 common.go:124: >>>> The winner organism found in [25] generation, fitness: 15.950968
<<<<<
INFO: 13:51:15 common.go:60:
>>>> Spawning new population
INFO: 13:51:15 common.go:66: OK <<<<<
INFO: 13:51:15 common.go:68: >>>> Verifying spawned population
INFO: 13:51:15 common.go:74: OK <<<<<
INFO: 13:51:15 common.go:95: >>>> Generation: 0 Run: 2
INFO: 13:51:15 common.go:95: >>>> Generation: 1 Run: 2
INFO: 13:51:15 common.go:95: >>>> Generation: 2 Run: 2
INFO: 13:51:15 common.go:95: >>>> Generation: 3 Run: 2
INFO: 13:51:15 common.go:95: >>>> Generation: 4 Run: 2
INFO: 13:51:15 common.go:95: >>>> Generation: 5 Run: 2
INFO: 13:51:15 common.go:95: >>>> Generation: 6 Run: 2
INFO: 13:51:15 common.go:95: >>>> Generation: 7 Run: 2
INFO: 13:51:15 common.go:95: >>>> Generation: 8 Run: 2
INFO: 13:51:15 common.go:95: >>>> Generation: 9 Run: 2
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[illegible]

[illegible]

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INFO: 13:51:16 common.go:95: >>>> Generation: 80 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 81 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 82 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 83 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 84 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 85 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 86 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 87 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 88 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 89 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 90 Run: 2
INFO: 13:51:16 common.go:95: >>>> Generation: 91 Run: 2
INFO: 13:51:16 XOR.go:162: >>>> Output activations: [7.334326e-13 9.992992e-01 9.541085e-01 2.100222e-04]
INFO: 13:51:16 XOR.go:90: Generation #91 winner dumped to: ./out/xor/2/xor_winner_9-18
INFO: 13:51:16 common.go:124: >>>> The winner organism found in [91] generation, fitness: 15.627772
<<<<<
INFO: 13:51:16 common.go:60:
>>>> Spawning new population
INFO: 13:51:16 common.go:66: OK <<<<<
INFO: 13:51:16 common.go:68: >>>> Verifying spawned population
INFO: 13:51:16 common.go:74: OK <<<<<
INFO: 13:51:16 common.go:95: >>>> Generation: 0 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 1 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 2 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 3 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 4 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 5 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 6 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 7 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 8 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 9 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 10 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 11 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 12 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 13 Run: 3
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[illegible]



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INFO: 13:51:16 common.go:95: >>>> Generation: 49 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 50 Run: 3
INFO: 13:51:16 common.go:95: >>>> Generation: 51 Run: 3
INFO: 13:51:16 XOR.go:162: >>>> Output activations: [5.289279e-14 9.986618e-01 9.972797e-01 1.310376e-02]
INFO: 13:51:16 XOR.go:90: Generation #51 winner dumped to: ./out/xor/3/xor_winner_8-19
INFO: 13:51:16 common.go:124: >>>> The winner organism found in [51] generation, fitness: 15.862996
<<<<<
INFO: 13:51:16 common.go:60:
>>>> Spawning new population
INFO: 13:51:16 common.go:66: OK <<<<<
INFO: 13:51:16 common.go:68: >>>> Verifying spawned population
INFO: 13:51:16 common.go:74: OK <<<<<
INFO: 13:51:16 common.go:95: >>>> Generation: 0 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 1 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 2 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 3 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 4 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 5 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 6 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 7 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 8 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 9 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 10 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 11 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 12 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 13 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 14 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 15 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 16 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 17 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 18 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 19 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 20 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 21 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 22 Run: 4
```

[illegible]

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INFO: 13:51:16 common.go:95: >>>> Generation: 58 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 59 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 60 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 61 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 62 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 63 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 64 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 65 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 66 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 67 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 68 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 69 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 70 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 71 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 72 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 73 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 74 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 75 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 76 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 77 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 78 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 79 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 80 Run: 4
INFO: 13:51:16 common.go:95: >>>> Generation: 81 Run: 4
INFO: 13:51:16 XOR.go:162: >>>> Output activations: [9.390211e-06 1.000000e+00 9.768093e-01 8.205023e-04]
INFO: 13:51:16 XOR.go:90: Generation #81 winner dumped to: ./out/xor/4/xor_winner_8-19
INFO: 13:51:16 common.go:124: >>>> The winner organism found in [81] generation, fitness: 15.808412
<<<<<
INFO: 13:51:16 common.go:60:
>>>>> Spawning new population
INFO: 13:51:16 common.go:66: OK <<<<<
INFO: 13:51:16 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:16 common.go:74: OK <<<<<
INFO: 13:51:16 common.go:95: >>>>> Generation: 0 Run: 5
INFO: 13:51:16 common.go:95: >>>>> Generation: 1 Run: 5
```

```
INFO: 13:51:16 common.go:95: >>>> Generation: 2 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 3 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 4 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 5 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 6 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 7 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 8 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 9 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 10 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 11 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 12 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 13 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 14 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 15 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 16 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 17 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 18 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 19 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 20 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 21 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 22 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 23 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 24 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 25 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 26 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 27 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 28 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 29 Run: 5
INFO: 13:51:16 common.go:95: >>>> Generation: 30 Run: 5
INFO: 13:51:16 XOR.go:162: >>>> Output activations: [7.862900e-09 9.670638e-01 9.810766e-01 3.901336e-03]
INFO: 13:51:17 XOR.go:90: Generation #30 winner dumped to: ./out/xor/5/xor_winner_8-15
INFO: 13:51:17 common.go:124: >>>> The winner organism found in [30] generation, fitness: 15.557022
<<<<<
INFO: 13:51:17 common.go:60:
>>>> Spawning new population
```

```
INFO: 13:51:17 common.go:66: OK <<<<<
INFO: 13:51:17 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:17 common.go:74: OK <<<<<
INFO: 13:51:17 common.go:95: >>>>> Generation: 0 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 1 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 2 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 3 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 4 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 5 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 6 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 7 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 8 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 9 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 10 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 11 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 12 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 13 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 14 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 15 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 16 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 17 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 18 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 19 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 20 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 21 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 22 Run: 6
INFO: 13:51:17 common.go:95: >>>>> Generation: 23 Run: 6
INFO: 13:51:17 XOR.go:162: >>>>> Output activations: [2.137800e-07 9.999389e-01 9.999949e-01 7.717690e-06]
INFO: 13:51:17 XOR.go:90: Generation #23 winner dumped to: ./out/xor/6/xor_winner_6-9
INFO: 13:51:17 common.go:124: >>>>> The winner organism found in [23] generation, fitness: 15.999407
<<<<<
INFO: 13:51:17 common.go:60:
>>>>> Spawning new population
INFO: 13:51:17 common.go:66: OK <<<<<
INFO: 13:51:17 common.go:68: >>>>> Verifying spawned population
```

[illegible]

[illegible]

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INFO: 13:51:17 common.go:95: >>>> Generation: 69 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 70 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 71 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 72 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 73 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 74 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 75 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 76 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 77 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 78 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 79 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 80 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 81 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 82 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 83 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 84 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 85 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 86 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 87 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 88 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 89 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 90 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 91 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 92 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 93 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 94 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 95 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 96 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 97 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 98 Run: 7
INFO: 13:51:17 common.go:95: >>>> Generation: 99 Run: 7
INFO: 13:51:17 common.go:60:
>>>> Spawning new population
INFO: 13:51:17 common.go:66: OK <<<<<
INFO: 13:51:17 common.go:68: >>>> Verifying spawned population
```



[illegible]

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INFO: 13:51:17 common.go:95: >>>> Generation: 34 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 35 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 36 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 37 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 38 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 39 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 40 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 41 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 42 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 43 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 44 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 45 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 46 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 47 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 48 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 49 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 50 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 51 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 52 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 53 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 54 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 55 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 56 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 57 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 58 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 59 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 60 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 61 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 62 Run: 8
INFO: 13:51:17 common.go:95: >>>> Generation: 63 Run: 8
INFO: 13:51:17 XOR.go:162: >>>> Output activations: [1.007445e-17 9.999980e-01 9.999990e-01 8.866975e-09]
INFO: 13:51:17 XOR.go:90: Generation #63 winner dumped to: ./out/xor/8/xor_winner_8-21
INFO: 13:51:17 common.go:124: >>>> The winner organism found in [63] generation, fitness: 15.999975
<<<<<
INFO: 13:51:17 common.go:60:
```

```
>>>> Spawning new population
INFO: 13:51:17 common.go:66: OK <<<<
INFO: 13:51:17 common.go:68: >>>> Verifying spawned population
INFO: 13:51:17 common.go:74: OK <<<<
INFO: 13:51:17 common.go:95: >>>> Generation: 0 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 1 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 2 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 3 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 4 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 5 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 6 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 7 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 8 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 9 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 10 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 11 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 12 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 13 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 14 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 15 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 16 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 17 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 18 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 19 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 20 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 21 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 22 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 23 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 24 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 25 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 26 Run: 9
INFO: 13:51:17 common.go:95: >>>> Generation: 27 Run: 9
INFO: 13:51:17 XOR.go:162: >>>> Output activations: [1.958415e-12 9.934031e-01 9.999978e-01 2.057302e-03]
INFO: 13:51:17 XOR.go:58: Dumped optimal genome to: ./out/xor/9/xor_optimal_5-7
INFO: 13:51:17 XOR.go:90: Generation #27 winner dumped to: ./out/xor/9/xor_winner_5-7
```

```
INFO: 13:51:17 common.go:124: >>>> The winner organism found in [27] generation, fitness: 15.930823
<<<<<
INFO: 13:51:17 common.go:60:
>>>> Spawning new population
INFO: 13:51:17 common.go:66: OK <<<<<
INFO: 13:51:17 common.go:68: >>>> Verifying spawned population
INFO: 13:51:17 common.go:74: OK <<<<<
INFO: 13:51:17 common.go:95: >>>> Generation: 0 Run: 10
INFO: 13:51:17 common.go:95: >>>> Generation: 1 Run: 10
INFO: 13:51:17 common.go:95: >>>> Generation: 2 Run: 10
INFO: 13:51:17 common.go:95: >>>> Generation: 3 Run: 10
INFO: 13:51:17 common.go:95: >>>> Generation: 4 Run: 10
INFO: 13:51:17 common.go:95: >>>> Generation: 5 Run: 10
INFO: 13:51:17 common.go:95: >>>> Generation: 6 Run: 10
INFO: 13:51:17 common.go:95: >>>> Generation: 7 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 8 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 9 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 10 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 11 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 12 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 13 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 14 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 15 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 16 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 17 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 18 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 19 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 20 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 21 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 22 Run: 10
INFO: 13:51:18 common.go:95: >>>> Generation: 23 Run: 10
INFO: 13:51:18 XOR.go:162: >>>> Output activations: [3.086141e-04 9.994154e-01 9.995549e-01 8.676638e-04]
INFO: 13:51:18 XOR.go:90: Generation #23 winner dumped to: ./out/xor/10/xor_winner_6-11
INFO: 13:51:18 common.go:124: >>>> The winner organism found in [23] generation, fitness: 15.982357
<<<<<
```

```
INFO: 13:51:18 common.go:60:
>>>> Spawning new population
INFO: 13:51:18 common.go:66: OK <<<<
INFO: 13:51:18 common.go:68: >>>> Verifying spawned population
INFO: 13:51:18 common.go:74: OK <<<<
INFO: 13:51:18 common.go:95: >>>> Generation: 0 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 1 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 2 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 3 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 4 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 5 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 6 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 7 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 8 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 9 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 10 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 11 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 12 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 13 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 14 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 15 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 16 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 17 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 18 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 19 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 20 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 21 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 22 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 23 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 24 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 25 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 26 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 27 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 28 Run: 11
INFO: 13:51:18 common.go:95: >>>> Generation: 29 Run: 11
```

[illegible]

```
INFO: 13:51:18 common.go:95: >>>> Generation: 65 Run: 11
INFO: 13:51:18 XOR.go:162: >>>> Output activations: [1.662728e-02 1.000000e+00 9.912197e-01 3.423843e-03]
INFO: 13:51:18 XOR.go:90: Generation #65 winner dumped to: ./out/xor/11/xor_winner_7-15
INFO: 13:51:18 common.go:124: >>>> The winner organism found in [65] generation, fitness: 15.770180
<<<<<
INFO: 13:51:18 common.go:60:
>>>> Spawning new population
INFO: 13:51:18 common.go:66: OK <<<<<
INFO: 13:51:18 common.go:68: >>>> Verifying spawned population
INFO: 13:51:18 common.go:74: OK <<<<<
INFO: 13:51:18 common.go:95: >>>> Generation: 0 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 1 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 2 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 3 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 4 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 5 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 6 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 7 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 8 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 9 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 10 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 11 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 12 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 13 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 14 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 15 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 16 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 17 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 18 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 19 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 20 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 21 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 22 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 23 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 24 Run: 12
```

[illegible]



```
INFO: 13:51:18 common.go:95: >>>> Generation: 60 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 61 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 62 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 63 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 64 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 65 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 66 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 67 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 68 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 69 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 70 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 71 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 72 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 73 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 74 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 75 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 76 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 77 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 78 Run: 12
INFO: 13:51:18 common.go:95: >>>> Generation: 79 Run: 12
INFO: 13:51:18 XOR.go:162: >>>> Output activations: [7.382415e-07 9.993198e-01 1.000000e+00 2.812161e-08]
INFO: 13:51:18 XOR.go:90: Generation #79 winner dumped to: ./out/xor/12/xor_winner_7-14
INFO: 13:51:18 common.go:124: >>>> The winner organism found in [79] generation, fitness: 15.994553
<<<<<
INFO: 13:51:18 common.go:60:
>>>>> Spawning new population
INFO: 13:51:18 common.go:66: OK <<<<<
INFO: 13:51:18 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:18 common.go:74: OK <<<<<
INFO: 13:51:18 common.go:95: >>>>> Generation: 0 Run: 13
INFO: 13:51:18 common.go:95: >>>>> Generation: 1 Run: 13
INFO: 13:51:18 common.go:95: >>>>> Generation: 2 Run: 13
INFO: 13:51:18 common.go:95: >>>>> Generation: 3 Run: 13
INFO: 13:51:18 common.go:95: >>>>> Generation: 4 Run: 13
INFO: 13:51:18 common.go:95: >>>>> Generation: 5 Run: 13
```

```
INFO: 13:51:18 common.go:95: >>>> Generation: 6 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 7 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 8 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 9 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 10 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 11 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 12 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 13 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 14 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 15 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 16 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 17 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 18 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 19 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 20 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 21 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 22 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 23 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 24 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 25 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 26 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 27 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 28 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 29 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 30 Run: 13
INFO: 13:51:18 common.go:95: >>>> Generation: 31 Run: 13
INFO: 13:51:18 XOR.go:162: >>>> Output activations: [3.742411e-02 9.999845e-01 9.994469e-01 1.458075e-08]
INFO: 13:51:18 XOR.go:90: Generation #31 winner dumped to: ./out/xor/13/xor_winner_7-13
INFO: 13:51:18 common.go:124: >>>> The winner organism found in [31] generation, fitness: 15.697502
<<<<<
INFO: 13:51:18 common.go:60:
>>>>> Spawning new population
INFO: 13:51:18 common.go:66: OK <<<<<
INFO: 13:51:18 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:18 common.go:74: OK <<<<<
```

[illegible]

```
INFO: 13:51:19 common.go:95: >>>> Generation: 35 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 36 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 37 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 38 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 39 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 40 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 41 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 42 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 43 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 44 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 45 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 46 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 47 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 48 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 49 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 50 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 51 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 52 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 53 Run: 14
INFO: 13:51:19 common.go:95: >>>> Generation: 54 Run: 14
INFO: 13:51:19 XOR.go:162: >>>> Output activations: [5.561717e-03 9.987479e-01 1.000000e+00 4.344168e-02]
INFO: 13:51:19 XOR.go:58: Dumped optimal genome to: ./out/xor/14/xor_optimal_5-6
INFO: 13:51:19 XOR.go:90: Generation #54 winner dumped to: ./out/xor/14/xor_winner_5-6
INFO: 13:51:19 common.go:124: >>>> The winner organism found in [54] generation, fitness: 15.600482
<<<<<
INFO: 13:51:19 common.go:60:
>>>> Spawning new population
INFO: 13:51:19 common.go:66: OK <<<<<
INFO: 13:51:19 common.go:68: >>>> Verifying spawned population
INFO: 13:51:19 common.go:74: OK <<<<<
INFO: 13:51:19 common.go:95: >>>> Generation: 0 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 1 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 2 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 3 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 4 Run: 15
```

[illegible]

[illegible]

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INFO: 13:51:19 common.go:95: >>>> Generation: 75 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 76 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 77 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 78 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 79 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 80 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 81 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 82 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 83 Run: 15
INFO: 13:51:19 common.go:95: >>>> Generation: 84 Run: 15
INFO: 13:51:19 XOR.go:162: >>>> Output activations: [1.262888e-06 9.982169e-01 1.000000e+00 7.878122e-04]
INFO: 13:51:19 XOR.go:90: Generation #84 winner dumped to: ./out/xor/15/xor_winner_9-24
INFO: 13:51:19 common.go:124: >>>> The winner organism found in [84] generation, fitness: 15.979429
<<<<<
INFO: 13:51:19 common.go:60:
>>>> Spawning new population
INFO: 13:51:19 common.go:66: OK <<<<<
INFO: 13:51:19 common.go:68: >>>> Verifying spawned population
INFO: 13:51:19 common.go:74: OK <<<<<
INFO: 13:51:19 common.go:95: >>>> Generation: 0 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 1 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 2 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 3 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 4 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 5 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 6 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 7 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 8 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 9 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 10 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 11 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 12 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 13 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 14 Run: 16
INFO: 13:51:19 common.go:95: >>>> Generation: 15 Run: 16
```

[illegible]



```
INFO: 13:51:19 common.go:95: >>>> Generation: 51 Run: 16
INFO: 13:51:19 XOR.go:162: >>>> Output activations: [4.656209e-11 9.999997e-01 9.991971e-01 8.556573e-03]
INFO: 13:51:19 XOR.go:58: Dumped optimal genome to: ./out/xor/16/xor_optimal_5-7
INFO: 13:51:19 XOR.go:90: Generation #51 winner dumped to: ./out/xor/16/xor_winner_5-7
INFO: 13:51:19 common.go:124: >>>> The winner organism found in [51] generation, fitness: 15.925210
<<<<<
INFO: 13:51:19 common.go:60:
>>>> Spawning new population
INFO: 13:51:19 common.go:66: OK <<<<<
INFO: 13:51:19 common.go:68: >>>> Verifying spawned population
INFO: 13:51:19 common.go:74: OK <<<<<
INFO: 13:51:19 common.go:95: >>>> Generation: 0 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 1 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 2 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 3 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 4 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 5 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 6 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 7 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 8 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 9 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 10 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 11 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 12 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 13 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 14 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 15 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 16 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 17 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 18 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 19 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 20 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 21 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 22 Run: 17
INFO: 13:51:19 common.go:95: >>>> Generation: 23 Run: 17
```

[illegible]

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INFO: 13:51:20 common.go:95: >>>> Generation: 59 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 60 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 61 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 62 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 63 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 64 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 65 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 66 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 67 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 68 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 69 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 70 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 71 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 72 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 73 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 74 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 75 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 76 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 77 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 78 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 79 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 80 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 81 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 82 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 83 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 84 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 85 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 86 Run: 17
INFO: 13:51:20 common.go:95: >>>> Generation: 87 Run: 17
INFO: 13:51:20 XOR.go:162: >>>> Output activations: [2.206845e-17 9.649559e-01 1.000000e+00 1.587206e-05]
INFO: 13:51:20 XOR.go:90: Generation #87 winner dumped to: ./out/xor/17/xor_winner_7-16
INFO: 13:51:20 common.go:124: >>>> The winner organism found in [87] generation, fitness: 15.720749
<<<<<
INFO: 13:51:20 common.go:60:
>>>> Spawning new population
```

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INFO: 13:51:20 common.go:66: OK <<<<<
INFO: 13:51:20 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:20 common.go:74: OK <<<<<
INFO: 13:51:20 common.go:95: >>>>> Generation: 0 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 1 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 2 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 3 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 4 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 5 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 6 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 7 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 8 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 9 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 10 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 11 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 12 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 13 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 14 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 15 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 16 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 17 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 18 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 19 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 20 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 21 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 22 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 23 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 24 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 25 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 26 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 27 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 28 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 29 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 30 Run: 18
INFO: 13:51:20 common.go:95: >>>>> Generation: 31 Run: 18
```

```
INFO: 13:51:20 common.go:95: >>>> Generation: 32 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 33 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 34 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 35 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 36 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 37 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 38 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 39 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 40 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 41 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 42 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 43 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 44 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 45 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 46 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 47 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 48 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 49 Run: 18
INFO: 13:51:20 common.go:95: >>>> Generation: 50 Run: 18
INFO: 13:51:20 XOR.go:162: >>>> Output activations: [1.371985e-19 1.000000e+00 1.000000e+00 3.182615e-19]
INFO: 13:51:20 XOR.go:90: Generation #50 winner dumped to: ./out/xor/18/xor_winner_7-16
INFO: 13:51:20 common.go:124: >>>> The winner organism found in [50] generation, fitness: 16.000000
<<<<<
INFO: 13:51:20 common.go:60:
>>>> Spawning new population
INFO: 13:51:20 common.go:66: OK <<<<<
INFO: 13:51:20 common.go:68: >>>> Verifying spawned population
INFO: 13:51:20 common.go:74: OK <<<<<
INFO: 13:51:20 common.go:95: >>>> Generation: 0 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 1 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 2 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 3 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 4 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 5 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 6 Run: 19
```

```
INFO: 13:51:20 common.go:95: >>>> Generation: 7 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 8 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 9 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 10 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 11 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 12 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 13 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 14 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 15 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 16 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 17 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 18 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 19 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 20 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 21 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 22 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 23 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 24 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 25 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 26 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 27 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 28 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 29 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 30 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 31 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 32 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 33 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 34 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 35 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 36 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 37 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 38 Run: 19
INFO: 13:51:20 common.go:95: >>>> Generation: 39 Run: 19
INFO: 13:51:20 XOR.go:162: >>>> Output activations: [3.006390e-04 9.958187e-01 9.999731e-01 5.905357e-06]
INFO: 13:51:20 XOR.go:90: Generation #39 winner dumped to: ./out/xor/19/xor_winner_6-10
```

```
INFO: 13:51:20 common.go:124: >>>> The winner organism found in [39] generation, fitness: 15.963902
<<<<<
INFO: 13:51:20 common.go:60:
>>>> Spawning new population
INFO: 13:51:20 common.go:66: OK <<<<<
INFO: 13:51:20 common.go:68: >>>> Verifying spawned population
INFO: 13:51:20 common.go:74: OK <<<<<
INFO: 13:51:20 common.go:95: >>>> Generation: 0 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 1 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 2 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 3 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 4 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 5 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 6 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 7 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 8 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 9 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 10 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 11 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 12 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 13 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 14 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 15 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 16 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 17 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 18 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 19 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 20 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 21 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 22 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 23 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 24 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 25 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 26 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 27 Run: 20
```

```
INFO: 13:51:20 common.go:95: >>>> Generation: 28 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 29 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 30 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 31 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 32 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 33 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 34 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 35 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 36 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 37 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 38 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 39 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 40 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 41 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 42 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 43 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 44 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 45 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 46 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 47 Run: 20
INFO: 13:51:20 common.go:95: >>>> Generation: 48 Run: 20
INFO: 13:51:20 XOR.go:162: >>>> Output activations: [1.745269e-06 1.000000e+00 9.392937e-01 2.761754e-05]
INFO: 13:51:20 XOR.go:58: Dumped optimal genome to: ./out/xor/20/xor_optimal_5-7
INFO: 13:51:20 XOR.go:90: Generation #48 winner dumped to: ./out/xor/20/xor_winner_5-7
INFO: 13:51:20 common.go:124: >>>> The winner organism found in [48] generation, fitness: 15.517803
<<<<<
INFO: 13:51:20 common.go:60:
>>>> Spawning new population
INFO: 13:51:20 common.go:66: OK <<<<<
INFO: 13:51:20 common.go:68: >>>> Verifying spawned population
INFO: 13:51:20 common.go:74: OK <<<<<
INFO: 13:51:20 common.go:95: >>>> Generation: 0 Run: 21
INFO: 13:51:20 common.go:95: >>>> Generation: 1 Run: 21
INFO: 13:51:20 common.go:95: >>>> Generation: 2 Run: 21
INFO: 13:51:20 common.go:95: >>>> Generation: 3 Run: 21
```



[illegible]

[illegible]

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INFO: 13:51:21 common.go:95: >>>> Generation: 74 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 75 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 76 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 77 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 78 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 79 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 80 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 81 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 82 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 83 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 84 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 85 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 86 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 87 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 88 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 89 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 90 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 91 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 92 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 93 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 94 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 95 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 96 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 97 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 98 Run: 21
INFO: 13:51:21 common.go:95: >>>> Generation: 99 Run: 21
INFO: 13:51:21 common.go:60:
>>>> Spawning new population
INFO: 13:51:21 common.go:66: OK <<<<<
INFO: 13:51:21 common.go:68: >>>> Verifying spawned population
INFO: 13:51:21 common.go:74: OK <<<<<
INFO: 13:51:21 common.go:95: >>>> Generation: 0 Run: 22
INFO: 13:51:21 common.go:95: >>>> Generation: 1 Run: 22
INFO: 13:51:21 common.go:95: >>>> Generation: 2 Run: 22
INFO: 13:51:21 common.go:95: >>>> Generation: 3 Run: 22
```

[illegible]

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INFO: 13:51:21 common.go:95: >>>> Generation: 39 Run: 22
INFO: 13:51:21 XOR.go:162: >>>> Output activations: [3.610920e-06 9.722331e-01 1.000000e+00 1.682556e-02]
INFO: 13:51:21 XOR.go:90: Generation #39 winner dumped to: ./out/xor/22/xor_winner_7-13
INFO: 13:51:21 common.go:124: >>>> The winner organism found in [39] generation, fitness: 15.645220
<<<<<
INFO: 13:51:21 common.go:60:
>>>> Spawning new population
INFO: 13:51:21 common.go:66: OK <<<<<
INFO: 13:51:21 common.go:68: >>>> Verifying spawned population
INFO: 13:51:21 common.go:74: OK <<<<<
INFO: 13:51:21 common.go:95: >>>> Generation: 0 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 1 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 2 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 3 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 4 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 5 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 6 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 7 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 8 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 9 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 10 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 11 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 12 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 13 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 14 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 15 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 16 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 17 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 18 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 19 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 20 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 21 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 22 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 23 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 24 Run: 23
```

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INFO: 13:51:21 common.go:95: >>>> Generation: 25 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 26 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 27 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 28 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 29 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 30 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 31 Run: 23
INFO: 13:51:21 common.go:95: >>>> Generation: 32 Run: 23
INFO: 13:51:21 XOR.go:162: >>>> Output activations: [1.098265e-15 9.999384e-01 9.999990e-01 2.055503e-04]
INFO: 13:51:21 XOR.go:90: Generation #32 winner dumped to: ./out/xor/23/xor_winner_7-15
INFO: 13:51:21 common.go:124: >>>> The winner organism found in [32] generation, fitness: 15.997855
<<<<<
INFO: 13:51:21 common.go:60:
>>>> Spawning new population
INFO: 13:51:21 common.go:66: OK <<<<<
INFO: 13:51:21 common.go:68: >>>> Verifying spawned population
INFO: 13:51:21 common.go:74: OK <<<<<
INFO: 13:51:21 common.go:95: >>>> Generation: 0 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 1 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 2 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 3 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 4 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 5 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 6 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 7 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 8 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 9 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 10 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 11 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 12 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 13 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 14 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 15 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 16 Run: 24
INFO: 13:51:21 common.go:95: >>>> Generation: 17 Run: 24
```

[illegible]

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INFO: 13:51:21 common.go:95: >>>> Generation: 53 Run: 24
INFO: 13:51:21 XOR.go:162: >>>> Output activations: [5.898683e-03 1.000000e+00 1.000000e+00 1.891788e-02]
INFO: 13:51:21 XOR.go:90: Generation #53 winner dumped to: ./out/xor/24/xor_winner_7-12
INFO: 13:51:21 common.go:124: >>>> The winner organism found in [53] generation, fitness: 15.802083
<<<<<
INFO: 13:51:21 common.go:60:
>>>> Spawning new population
INFO: 13:51:21 common.go:66: OK <<<<<
INFO: 13:51:21 common.go:68: >>>> Verifying spawned population
INFO: 13:51:21 common.go:74: OK <<<<<
INFO: 13:51:21 common.go:95: >>>> Generation: 0 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 1 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 2 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 3 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 4 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 5 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 6 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 7 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 8 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 9 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 10 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 11 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 12 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 13 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 14 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 15 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 16 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 17 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 18 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 19 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 20 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 21 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 22 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 23 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 24 Run: 25
```



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INFO: 13:51:21 common.go:95: >>>> Generation: 25 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 26 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 27 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 28 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 29 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 30 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 31 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 32 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 33 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 34 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 35 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 36 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 37 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 38 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 39 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 40 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 41 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 42 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 43 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 44 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 45 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 46 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 47 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 48 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 49 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 50 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 51 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 52 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 53 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 54 Run: 25
INFO: 13:51:21 common.go:95: >>>> Generation: 55 Run: 25
INFO: 13:51:21 XOR.go:162: >>>> Output activations: [8.929296e-03 9.994754e-01 9.999987e-01 3.251242e-22]
INFO: 13:51:21 XOR.go:90: Generation #55 winner dumped to: ./out/xor/25/xor_winner_11-28
INFO: 13:51:21 common.go:124: >>>> The winner organism found in [55] generation, fitness: 15.924448
<<<<<
```

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INFO: 13:51:21 common.go:60:
>>>> Spawning new population
INFO: 13:51:21 common.go:66: OK <<<<
INFO: 13:51:21 common.go:68: >>>> Verifying spawned population
INFO: 13:51:21 common.go:74: OK <<<<
INFO: 13:51:21 common.go:95: >>>> Generation: 0 Run: 26
INFO: 13:51:21 common.go:95: >>>> Generation: 1 Run: 26
INFO: 13:51:21 common.go:95: >>>> Generation: 2 Run: 26
INFO: 13:51:21 common.go:95: >>>> Generation: 3 Run: 26
INFO: 13:51:21 common.go:95: >>>> Generation: 4 Run: 26
INFO: 13:51:21 common.go:95: >>>> Generation: 5 Run: 26
INFO: 13:51:21 common.go:95: >>>> Generation: 6 Run: 26
INFO: 13:51:21 common.go:95: >>>> Generation: 7 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 8 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 9 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 10 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 11 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 12 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 13 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 14 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 15 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 16 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 17 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 18 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 19 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 20 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 21 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 22 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 23 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 24 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 25 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 26 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 27 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 28 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 29 Run: 26
```

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INFO: 13:51:22 common.go:95: >>>> Generation: 30 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 31 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 32 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 33 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 34 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 35 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 36 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 37 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 38 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 39 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 40 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 41 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 42 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 43 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 44 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 45 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 46 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 47 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 48 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 49 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 50 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 51 Run: 26
INFO: 13:51:22 common.go:95: >>>> Generation: 52 Run: 26
INFO: 13:51:22 XOR.go:162: >>>> Output activations: [3.231575e-12 9.994202e-01 9.917344e-01 4.076996e-02]
INFO: 13:51:22 XOR.go:58: Dumped optimal genome to: ./out/xor/26/xor_optimal_5-7
INFO: 13:51:22 XOR.go:90: Generation #52 winner dumped to: ./out/xor/26/xor_winner_5-7
INFO: 13:51:22 common.go:124: >>>> The winner organism found in [52] generation, fitness: 15.605539
<<<<<
INFO: 13:51:22 common.go:60:
>>>>> Spawning new population
INFO: 13:51:22 common.go:66: OK <<<<<
INFO: 13:51:22 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:22 common.go:74: OK <<<<<
INFO: 13:51:22 common.go:95: >>>>> Generation: 0 Run: 27
INFO: 13:51:22 common.go:95: >>>>> Generation: 1 Run: 27

```

[illegible]

[illegible]

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INFO: 13:51:22 common.go:95: >>>> Generation: 72 Run: 27
INFO: 13:51:22 common.go:95: >>>> Generation: 73 Run: 27
INFO: 13:51:22 common.go:95: >>>> Generation: 74 Run: 27
INFO: 13:51:22 common.go:95: >>>> Generation: 75 Run: 27
INFO: 13:51:22 common.go:95: >>>> Generation: 76 Run: 27
INFO: 13:51:22 common.go:95: >>>> Generation: 77 Run: 27
INFO: 13:51:22 common.go:95: >>>> Generation: 78 Run: 27
INFO: 13:51:22 common.go:95: >>>> Generation: 79 Run: 27
INFO: 13:51:22 common.go:95: >>>> Generation: 80 Run: 27
INFO: 13:51:22 common.go:95: >>>> Generation: 81 Run: 27
INFO: 13:51:22 XOR.go:162: >>>> Output activations: [9.012576e-15 9.977850e-01 9.885470e-01 1.154977e-06]
INFO: 13:51:22 XOR.go:90: Generation #81 winner dumped to: ./out/xor/27/xor_winner_6-12
INFO: 13:51:22 common.go:124: >>>> The winner organism found in [81] generation, fitness: 15.890833
<<<<<
INFO: 13:51:22 common.go:60:
>>>> Spawning new population
INFO: 13:51:22 common.go:66: OK <<<<<
INFO: 13:51:22 common.go:68: >>>> Verifying spawned population
INFO: 13:51:22 common.go:74: OK <<<<<
INFO: 13:51:22 common.go:95: >>>> Generation: 0 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 1 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 2 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 3 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 4 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 5 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 6 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 7 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 8 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 9 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 10 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 11 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 12 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 13 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 14 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 15 Run: 28
```

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INFO: 13:51:22 common.go:95: >>>> Generation: 16 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 17 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 18 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 19 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 20 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 21 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 22 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 23 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 24 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 25 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 26 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 27 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 28 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 29 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 30 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 31 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 32 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 33 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 34 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 35 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 36 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 37 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 38 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 39 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 40 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 41 Run: 28
INFO: 13:51:22 common.go:95: >>>> Generation: 42 Run: 28
INFO: 13:51:22 XOR.go:162: >>>> Output activations: [9.150153e-25 9.995462e-01 9.460673e-01 7.614496e-04]
INFO: 13:51:22 XOR.go:90: Generation #42 winner dumped to: ./out/xor/28/xor_winner_6-11
INFO: 13:51:22 common.go:124: >>>> The winner organism found in [42] generation, fitness: 15.561858
<<<<<
INFO: 13:51:22 common.go:60:
>>>>> Spawning new population
INFO: 13:51:22 common.go:66: OK <<<<<
INFO: 13:51:22 common.go:68: >>>>> Verifying spawned population
```

[illegible]



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INFO: 13:51:22 common.go:95: >>>> Generation: 34 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 35 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 36 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 37 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 38 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 39 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 40 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 41 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 42 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 43 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 44 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 45 Run: 29
INFO: 13:51:22 common.go:95: >>>> Generation: 46 Run: 29
INFO: 13:51:23 common.go:95: >>>> Generation: 47 Run: 29
INFO: 13:51:23 common.go:95: >>>> Generation: 48 Run: 29
INFO: 13:51:23 common.go:95: >>>> Generation: 49 Run: 29
INFO: 13:51:23 common.go:95: >>>> Generation: 50 Run: 29
INFO: 13:51:23 common.go:95: >>>> Generation: 51 Run: 29
INFO: 13:51:23 common.go:95: >>>> Generation: 52 Run: 29
INFO: 13:51:23 XOR.go:162: >>>> Output activations: [4.787264e-06 9.994132e-01 1.000000e+00 2.905755e-10]
INFO: 13:51:23 XOR.go:90: Generation #52 winner dumped to: ./out/xor/29/xor_winner_7-14
INFO: 13:51:23 common.go:124: >>>> The winner organism found in [52] generation, fitness: 15.995268
<<<<<
INFO: 13:51:23 common.go:60:
>>>> Spawning new population
INFO: 13:51:23 common.go:66: OK <<<<<
INFO: 13:51:23 common.go:68: >>>> Verifying spawned population
INFO: 13:51:23 common.go:74: OK <<<<<
INFO: 13:51:23 common.go:95: >>>> Generation: 0 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 1 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 2 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 3 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 4 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 5 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 6 Run: 30
```

[illegible]

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INFO: 13:51:23 common.go:95: >>>> Generation: 42 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 43 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 44 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 45 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 46 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 47 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 48 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 49 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 50 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 51 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 52 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 53 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 54 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 55 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 56 Run: 30
INFO: 13:51:23 common.go:95: >>>> Generation: 57 Run: 30
INFO: 13:51:23 XOR.go:162: >>>> Output activations: [4.855438e-22 1.000000e+00 9.999996e-01 3.910692e-12]
INFO: 13:51:23 XOR.go:162: >>>> Output activations: [1.645875e-41 1.000000e+00 9.991735e-01 4.008740e-12]
INFO: 13:51:23 XOR.go:90: Generation #57 winner dumped to: ./out/xor/30/xor_winner_8-16
INFO: 13:51:23 common.go:124: >>>> The winner organism found in [57] generation, fitness: 15.999997
<<<<<
INFO: 13:51:23 common.go:60:
>>>>> Spawning new population
INFO: 13:51:23 common.go:66: OK <<<<<
INFO: 13:51:23 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:23 common.go:74: OK <<<<<
INFO: 13:51:23 common.go:95: >>>>> Generation: 0 Run: 31
INFO: 13:51:23 common.go:95: >>>>> Generation: 1 Run: 31
INFO: 13:51:23 common.go:95: >>>>> Generation: 2 Run: 31
INFO: 13:51:23 common.go:95: >>>>> Generation: 3 Run: 31
INFO: 13:51:23 common.go:95: >>>>> Generation: 4 Run: 31
INFO: 13:51:23 common.go:95: >>>>> Generation: 5 Run: 31
INFO: 13:51:23 common.go:95: >>>>> Generation: 6 Run: 31
INFO: 13:51:23 common.go:95: >>>>> Generation: 7 Run: 31
INFO: 13:51:23 common.go:95: >>>>> Generation: 8 Run: 31
```

[illegible]

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INFO: 13:51:23 common.go:95: >>>> Generation: 44 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 45 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 46 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 47 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 48 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 49 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 50 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 51 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 52 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 53 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 54 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 55 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 56 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 57 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 58 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 59 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 60 Run: 31
INFO: 13:51:23 common.go:95: >>>> Generation: 61 Run: 31
INFO: 13:51:23 XOR.go:162: >>>> Output activations: [2.290667e-03 1.000000e+00 9.999999e-01 6.123510e-09]
INFO: 13:51:23 XOR.go:90: Generation #61 winner dumped to: ./out/xor/31/xor_winner_6-12
INFO: 13:51:23 common.go:124: >>>> The winner organism found in [61] generation, fitness: 15.981679
<<<<<
INFO: 13:51:23 common.go:60:
>>>>> Spawning new population
INFO: 13:51:23 common.go:66: OK <<<<<
INFO: 13:51:23 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:23 common.go:74: OK <<<<<
INFO: 13:51:23 common.go:95: >>>>> Generation: 0 Run: 32
INFO: 13:51:23 common.go:95: >>>>> Generation: 1 Run: 32
INFO: 13:51:23 common.go:95: >>>>> Generation: 2 Run: 32
INFO: 13:51:23 common.go:95: >>>>> Generation: 3 Run: 32
INFO: 13:51:23 common.go:95: >>>>> Generation: 4 Run: 32
INFO: 13:51:23 common.go:95: >>>>> Generation: 5 Run: 32
INFO: 13:51:23 common.go:95: >>>>> Generation: 6 Run: 32
INFO: 13:51:23 common.go:95: >>>>> Generation: 7 Run: 32
```

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INFO: 13:51:23 common.go:95: >>>> Generation: 8 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 9 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 10 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 11 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 12 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 13 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 14 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 15 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 16 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 17 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 18 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 19 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 20 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 21 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 22 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 23 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 24 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 25 Run: 32
INFO: 13:51:23 common.go:95: >>>> Generation: 26 Run: 32
INFO: 13:51:23 XOR.go:162: >>>> Output activations: [8.541692e-05 9.999504e-01 9.903455e-01 4.228940e-02]
INFO: 13:51:23 XOR.go:90: Generation #26 winner dumped to: ./out/xor/32/xor_winner_6-10
INFO: 13:51:23 common.go:124: >>>> The winner organism found in [26] generation, fitness: 15.586081
<<<<<
INFO: 13:51:23 common.go:60:
>>>> Spawning new population
INFO: 13:51:23 common.go:66: OK <<<<<
INFO: 13:51:23 common.go:68: >>>> Verifying spawned population
INFO: 13:51:23 common.go:74: OK <<<<<
INFO: 13:51:23 common.go:95: >>>> Generation: 0 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 1 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 2 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 3 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 4 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 5 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 6 Run: 33
```

[illegible]

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INFO: 13:51:23 common.go:95: >>>> Generation: 42 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 43 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 44 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 45 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 46 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 47 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 48 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 49 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 50 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 51 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 52 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 53 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 54 Run: 33
INFO: 13:51:23 common.go:95: >>>> Generation: 55 Run: 33
INFO: 13:51:23 XOR.go:162: >>>> Output activations: [2.218472e-04 1.000000e+00 1.000000e+00 9.495931e-04]
INFO: 13:51:23 XOR.go:90: Generation #55 winner dumped to: ./out/xor/33/xor_winner_9-20
INFO: 13:51:23 common.go:124: >>>> The winner organism found in [55] generation, fitness: 15.990630
<<<<<
INFO: 13:51:23 common.go:60:
>>>> Spawning new population
INFO: 13:51:23 common.go:66: OK <<<<<
INFO: 13:51:23 common.go:68: >>>> Verifying spawned population
INFO: 13:51:23 common.go:74: OK <<<<<
INFO: 13:51:23 common.go:95: >>>> Generation: 0 Run: 34
INFO: 13:51:23 common.go:95: >>>> Generation: 1 Run: 34
INFO: 13:51:23 common.go:95: >>>> Generation: 2 Run: 34
INFO: 13:51:23 common.go:95: >>>> Generation: 3 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 4 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 5 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 6 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 7 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 8 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 9 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 10 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 11 Run: 34
```



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INFO: 13:51:24 common.go:95: >>>> Generation: 12 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 13 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 14 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 15 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 16 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 17 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 18 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 19 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 20 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 21 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 22 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 23 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 24 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 25 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 26 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 27 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 28 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 29 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 30 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 31 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 32 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 33 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 34 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 35 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 36 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 37 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 38 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 39 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 40 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 41 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 42 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 43 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 44 Run: 34
INFO: 13:51:24 common.go:95: >>>> Generation: 45 Run: 34
INFO: 13:51:24 XOR.go:162: >>>> Output activations: [3.679368e-04 1.000000e+00 9.976856e-01 6.705949e-09]
```

```
INFO: 13:51:24 XOR.go:90: Generation #45 winner dumped to: ./out/xor/34/xor_winner_6-11
INFO: 13:51:24 common.go:124: >>>> The winner organism found in [45] generation, fitness: 15.978548
<<<<<
INFO: 13:51:24 common.go:60:
>>>> Spawning new population
INFO: 13:51:24 common.go:66: OK <<<<<
INFO: 13:51:24 common.go:68: >>>> Verifying spawned population
INFO: 13:51:24 common.go:74: OK <<<<<
INFO: 13:51:24 common.go:95: >>>> Generation: 0 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 1 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 2 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 3 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 4 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 5 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 6 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 7 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 8 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 9 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 10 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 11 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 12 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 13 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 14 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 15 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 16 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 17 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 18 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 19 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 20 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 21 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 22 Run: 35
INFO: 13:51:24 common.go:95: >>>> Generation: 23 Run: 35
INFO: 13:51:24 XOR.go:162: >>>> Output activations: [2.561358e-11 9.997991e-01 9.990222e-01 2.946871e-03]
INFO: 13:51:24 XOR.go:58: Dumped optimal genome to: ./out/xor/35/xor_optimal_5-7
INFO: 13:51:24 XOR.go:90: Generation #23 winner dumped to: ./out/xor/35/xor_winner_5-7
```

```
INFO: 13:51:24 common.go:124: >>>> The winner organism found in [23] generation, fitness: 15.967012
<<<<<
INFO: 13:51:24 common.go:60:
>>>> Spawning new population
INFO: 13:51:24 common.go:66: OK <<<<<
INFO: 13:51:24 common.go:68: >>>> Verifying spawned population
INFO: 13:51:24 common.go:74: OK <<<<<
INFO: 13:51:24 common.go:95: >>>> Generation: 0 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 1 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 2 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 3 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 4 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 5 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 6 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 7 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 8 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 9 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 10 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 11 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 12 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 13 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 14 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 15 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 16 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 17 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 18 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 19 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 20 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 21 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 22 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 23 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 24 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 25 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 26 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 27 Run: 36
```

```
INFO: 13:51:24 common.go:95: >>>> Generation: 28 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 29 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 30 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 31 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 32 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 33 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 34 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 35 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 36 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 37 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 38 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 39 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 40 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 41 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 42 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 43 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 44 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 45 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 46 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 47 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 48 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 49 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 50 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 51 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 52 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 53 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 54 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 55 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 56 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 57 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 58 Run: 36
INFO: 13:51:24 common.go:95: >>>> Generation: 59 Run: 36
INFO: 13:51:24 XOR.go:162: >>>> Output activations: [2.581625e-09 9.962344e-01 9.999776e-01 2.247693e-08]
INFO: 13:51:24 XOR.go:90: Generation #59 winner dumped to: ./out/xor/36/xor_winner_7-18
INFO: 13:51:24 common.go:124: >>>> The winner organism found in [59] generation, fitness: 15.969711
```

<<<<<

INFO: 13:51:24 common.go:60:

>>>>> Spawning new population

INFO: 13:51:24 common.go:66: OK <<<<<

INFO: 13:51:24 common.go:68: >>>>> Verifying spawned population

INFO: 13:51:24 common.go:74: OK <<<<<

INFO: 13:51:24 common.go:95: >>>>> Generation: 0 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 1 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 2 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 3 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 4 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 5 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 6 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 7 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 8 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 9 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 10 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 11 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 12 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 13 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 14 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 15 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 16 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 17 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 18 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 19 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 20 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 21 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 22 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 23 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 24 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 25 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 26 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 27 Run: 37

INFO: 13:51:24 common.go:95: >>>>> Generation: 28 Run: 37

```
INFO: 13:51:24 common.go:95: >>>> Generation: 29 Run: 37
INFO: 13:51:24 common.go:95: >>>> Generation: 30 Run: 37
INFO: 13:51:24 common.go:95: >>>> Generation: 31 Run: 37
INFO: 13:51:24 common.go:95: >>>> Generation: 32 Run: 37
INFO: 13:51:24 common.go:95: >>>> Generation: 33 Run: 37
INFO: 13:51:24 common.go:95: >>>> Generation: 34 Run: 37
INFO: 13:51:24 common.go:95: >>>> Generation: 35 Run: 37
INFO: 13:51:24 common.go:95: >>>> Generation: 36 Run: 37
INFO: 13:51:24 common.go:95: >>>> Generation: 37 Run: 37
INFO: 13:51:24 common.go:95: >>>> Generation: 38 Run: 37
INFO: 13:51:24 XOR.go:162: >>>> Output activations: [1.362645e-04 9.999994e-01 9.999997e-01 1.379435e-02]
INFO: 13:51:24 XOR.go:58: Dumped optimal genome to: ./out/xor/37/xor_optimal_5-7
INFO: 13:51:24 XOR.go:90: Generation #38 winner dumped to: ./out/xor/37/xor_winner_5-7
INFO: 13:51:24 common.go:124: >>>> The winner organism found in [38] generation, fitness: 15.888742
<<<<<
INFO: 13:51:24 common.go:60:
>>>> Spawning new population
INFO: 13:51:24 common.go:66: OK <<<<<
INFO: 13:51:24 common.go:68: >>>> Verifying spawned population
INFO: 13:51:24 common.go:74: OK <<<<<
INFO: 13:51:24 common.go:95: >>>> Generation: 0 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 1 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 2 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 3 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 4 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 5 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 6 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 7 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 8 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 9 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 10 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 11 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 12 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 13 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 14 Run: 38
```

```
INFO: 13:51:24 common.go:95: >>>> Generation: 15 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 16 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 17 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 18 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 19 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 20 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 21 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 22 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 23 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 24 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 25 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 26 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 27 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 28 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 29 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 30 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 31 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 32 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 33 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 34 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 35 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 36 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 37 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 38 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 39 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 40 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 41 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 42 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 43 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 44 Run: 38
INFO: 13:51:24 common.go:95: >>>> Generation: 45 Run: 38
INFO: 13:51:24 XOR.go:162: >>>> Output activations: [9.931041e-04 9.999977e-01 9.788374e-01 1.463350e-02]
INFO: 13:51:24 XOR.go:90: Generation #45 winner dumped to: ./out/xor/38/xor_winner_10-23
INFO: 13:51:24 common.go:124: >>>> The winner organism found in [45] generation, fitness: 15.707022
<<<<<
```

```
INFO: 13:51:24 common.go:60:
>>>> Spawning new population
INFO: 13:51:24 common.go:66: OK <<<<
INFO: 13:51:24 common.go:68: >>>> Verifying spawned population
INFO: 13:51:24 common.go:74: OK <<<<
INFO: 13:51:24 common.go:95: >>>> Generation: 0 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 1 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 2 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 3 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 4 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 5 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 6 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 7 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 8 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 9 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 10 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 11 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 12 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 13 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 14 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 15 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 16 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 17 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 18 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 19 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 20 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 21 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 22 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 23 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 24 Run: 39
INFO: 13:51:24 common.go:95: >>>> Generation: 25 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 26 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 27 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 28 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 29 Run: 39
```



[illegible]

```
INFO: 13:51:25 common.go:95: >>>> Generation: 65 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 66 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 67 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 68 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 69 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 70 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 71 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 72 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 73 Run: 39
INFO: 13:51:25 common.go:95: >>>> Generation: 74 Run: 39
INFO: 13:51:25 XOR.go:162: >>>> Output activations: [4.150890e-03 1.000000e+00 9.999840e-01 4.260994e-21]
INFO: 13:51:25 XOR.go:90: Generation #74 winner dumped to: ./out/xor/39/xor_winner_10-22
INFO: 13:51:25 common.go:124: >>>> The winner organism found in [74] generation, fitness: 15.966682
<<<<<
INFO: 13:51:25 common.go:60:
>>>> Spawning new population
INFO: 13:51:25 common.go:66: OK <<<<<
INFO: 13:51:25 common.go:68: >>>> Verifying spawned population
INFO: 13:51:25 common.go:74: OK <<<<<
INFO: 13:51:25 common.go:95: >>>> Generation: 0 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 1 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 2 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 3 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 4 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 5 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 6 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 7 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 8 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 9 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 10 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 11 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 12 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 13 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 14 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 15 Run: 40
```

```
INFO: 13:51:25 common.go:95: >>>> Generation: 16 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 17 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 18 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 19 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 20 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 21 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 22 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 23 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 24 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 25 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 26 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 27 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 28 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 29 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 30 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 31 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 32 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 33 Run: 40
INFO: 13:51:25 common.go:95: >>>> Generation: 34 Run: 40
INFO: 13:51:25 XOR.go:162: >>>> Output activations: [1.467911e-07 1.000000e+00 9.993659e-01 5.992822e-02]
INFO: 13:51:25 XOR.go:58: Dumped optimal genome to: ./out/xor/40/xor_optimal_5-7
INFO: 13:51:25 XOR.go:90: Generation #34 winner dumped to: ./out/xor/40/xor_winner_5-7
INFO: 13:51:25 common.go:124: >>>> The winner organism found in [34] generation, fitness: 15.519168
<<<<<
INFO: 13:51:25 common.go:60:
>>>>> Spawning new population
INFO: 13:51:25 common.go:66: OK <<<<<
INFO: 13:51:25 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:25 common.go:74: OK <<<<<
INFO: 13:51:25 common.go:95: >>>>> Generation: 0 Run: 41
INFO: 13:51:25 common.go:95: >>>>> Generation: 1 Run: 41
INFO: 13:51:25 common.go:95: >>>>> Generation: 2 Run: 41
INFO: 13:51:25 common.go:95: >>>>> Generation: 3 Run: 41
INFO: 13:51:25 common.go:95: >>>>> Generation: 4 Run: 41
INFO: 13:51:25 common.go:95: >>>>> Generation: 5 Run: 41
```

```
INFO: 13:51:25 common.go:95: >>>> Generation: 6 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 7 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 8 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 9 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 10 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 11 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 12 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 13 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 14 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 15 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 16 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 17 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 18 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 19 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 20 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 21 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 22 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 23 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 24 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 25 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 26 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 27 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 28 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 29 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 30 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 31 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 32 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 33 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 34 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 35 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 36 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 37 Run: 41
INFO: 13:51:25 common.go:95: >>>> Generation: 38 Run: 41
INFO: 13:51:25 XOR.go:162: >>>> Output activations: [1.972524e-04 9.999999e-01 9.999966e-01 2.294191e-03]
INFO: 13:51:25 XOR.go:90: Generation #38 winner dumped to: ./out/xor/41/xor_winner_7-14
```

```
INFO: 13:51:25 common.go:124: >>>> The winner organism found in [38] generation, fitness: 15.980047
<<<<<
INFO: 13:51:25 common.go:60:
>>>> Spawning new population
INFO: 13:51:25 common.go:66: OK <<<<<
INFO: 13:51:25 common.go:68: >>>> Verifying spawned population
INFO: 13:51:25 common.go:74: OK <<<<<
INFO: 13:51:25 common.go:95: >>>> Generation: 0 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 1 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 2 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 3 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 4 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 5 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 6 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 7 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 8 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 9 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 10 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 11 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 12 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 13 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 14 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 15 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 16 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 17 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 18 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 19 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 20 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 21 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 22 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 23 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 24 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 25 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 26 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 27 Run: 42
```

```
INFO: 13:51:25 common.go:95: >>>> Generation: 28 Run: 42
INFO: 13:51:25 common.go:95: >>>> Generation: 29 Run: 42
INFO: 13:51:25 XOR.go:162: >>>> Output activations: [5.569637e-16 1.000000e+00 9.999998e-01 1.988219e-03]
INFO: 13:51:25 XOR.go:90: Generation #29 winner dumped to: ./out/xor/42/xor_winner_7-13
INFO: 13:51:25 common.go:124: >>>> The winner organism found in [29] generation, fitness: 15.984097
<<<<<
INFO: 13:51:25 common.go:60:
>>>> Spawning new population
INFO: 13:51:25 common.go:66: OK <<<<<
INFO: 13:51:25 common.go:68: >>>> Verifying spawned population
INFO: 13:51:25 common.go:74: OK <<<<<
INFO: 13:51:25 common.go:95: >>>> Generation: 0 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 1 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 2 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 3 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 4 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 5 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 6 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 7 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 8 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 9 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 10 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 11 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 12 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 13 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 14 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 15 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 16 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 17 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 18 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 19 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 20 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 21 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 22 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 23 Run: 43
```

[illegible]

```
INFO: 13:51:25 common.go:95: >>>> Generation: 59 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 60 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 61 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 62 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 63 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 64 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 65 Run: 43
INFO: 13:51:25 common.go:95: >>>> Generation: 66 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 67 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 68 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 69 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 70 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 71 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 72 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 73 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 74 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 75 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 76 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 77 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 78 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 79 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 80 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 81 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 82 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 83 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 84 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 85 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 86 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 87 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 88 Run: 43
INFO: 13:51:26 common.go:95: >>>> Generation: 89 Run: 43
INFO: 13:51:26 XOR.go:162: >>>> Output activations: [4.780654e-02 9.996372e-01 1.000000e+00 7.414260e-05]
INFO: 13:51:26 XOR.go:90: Generation #89 winner dumped to: ./out/xor/43/xor_winner_10-24
INFO: 13:51:26 common.go:124: >>>> The winner organism found in [89] generation, fitness: 15.616380
<<<<<
```



```
INFO: 13:51:26 common.go:60:
>>>> Spawning new population
INFO: 13:51:26 common.go:66: OK <<<<
INFO: 13:51:26 common.go:68: >>>> Verifying spawned population
INFO: 13:51:26 common.go:74: OK <<<<
INFO: 13:51:26 common.go:95: >>>> Generation: 0 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 1 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 2 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 3 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 4 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 5 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 6 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 7 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 8 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 9 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 10 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 11 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 12 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 13 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 14 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 15 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 16 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 17 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 18 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 19 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 20 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 21 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 22 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 23 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 24 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 25 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 26 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 27 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 28 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 29 Run: 44
```

[illegible]

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INFO: 13:51:26 common.go:95: >>>> Generation: 65 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 66 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 67 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 68 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 69 Run: 44
INFO: 13:51:26 common.go:95: >>>> Generation: 70 Run: 44
INFO: 13:51:26 XOR.go:162: >>>> Output activations: [2.179791e-21 1.000000e+00 9.999995e-01 4.736094e-05]
INFO: 13:51:26 XOR.go:90: Generation #70 winner dumped to: ./out/xor/44/xor_winner_6-11
INFO: 13:51:26 common.go:124: >>>> The winner organism found in [70] generation, fitness: 15.999617
<<<<<
INFO: 13:51:26 common.go:60:
>>>> Spawning new population
INFO: 13:51:26 common.go:66: OK <<<<<
INFO: 13:51:26 common.go:68: >>>> Verifying spawned population
INFO: 13:51:26 common.go:74: OK <<<<<
INFO: 13:51:26 common.go:95: >>>> Generation: 0 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 1 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 2 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 3 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 4 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 5 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 6 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 7 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 8 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 9 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 10 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 11 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 12 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 13 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 14 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 15 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 16 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 17 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 18 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 19 Run: 45
```

```
INFO: 13:51:26 common.go:95: >>>> Generation: 20 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 21 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 22 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 23 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 24 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 25 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 26 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 27 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 28 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 29 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 30 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 31 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 32 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 33 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 34 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 35 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 36 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 37 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 38 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 39 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 40 Run: 45
INFO: 13:51:26 common.go:95: >>>> Generation: 41 Run: 45
INFO: 13:51:26 XOR.go:162: >>>> Output activations: [2.354595e-10 9.999031e-01 1.000000e+00 3.755436e-02]
INFO: 13:51:26 XOR.go:90: Generation #41 winner dumped to: ./out/xor/45/xor_winner_7-12
INFO: 13:51:26 common.go:124: >>>> The winner organism found in [41] generation, fitness: 15.700208
<<<<<
INFO: 13:51:26 common.go:60:
>>>>> Spawning new population
INFO: 13:51:26 common.go:66: OK <<<<<
INFO: 13:51:26 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:26 common.go:74: OK <<<<<
INFO: 13:51:26 common.go:95: >>>>> Generation: 0 Run: 46
INFO: 13:51:26 common.go:95: >>>>> Generation: 1 Run: 46
INFO: 13:51:26 common.go:95: >>>>> Generation: 2 Run: 46
INFO: 13:51:26 common.go:95: >>>>> Generation: 3 Run: 46
```

[illegible]

```
INFO: 13:51:26 common.go:95: >>>> Generation: 39 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 40 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 41 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 42 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 43 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 44 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 45 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 46 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 47 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 48 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 49 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 50 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 51 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 52 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 53 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 54 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 55 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 56 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 57 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 58 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 59 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 60 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 61 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 62 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 63 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 64 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 65 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 66 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 67 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 68 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 69 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 70 Run: 46
INFO: 13:51:26 common.go:95: >>>> Generation: 71 Run: 46
INFO: 13:51:26 XOR.go:162: >>>> Output activations: [6.181589e-17 9.972244e-01 9.989077e-01 3.798567e-02]
INFO: 13:51:26 XOR.go:90: Generation #71 winner dumped to: ./out/xor/46/xor_winner_8-18
```

```
INFO: 13:51:26 common.go:124: >>>> The winner organism found in [71] generation, fitness: 15.666923
<<<<<
INFO: 13:51:26 common.go:60:
>>>> Spawning new population
INFO: 13:51:26 common.go:66: OK <<<<<
INFO: 13:51:26 common.go:68: >>>> Verifying spawned population
INFO: 13:51:26 common.go:74: OK <<<<<
INFO: 13:51:26 common.go:95: >>>> Generation: 0 Run: 47
INFO: 13:51:26 common.go:95: >>>> Generation: 1 Run: 47
INFO: 13:51:26 common.go:95: >>>> Generation: 2 Run: 47
INFO: 13:51:26 common.go:95: >>>> Generation: 3 Run: 47
INFO: 13:51:26 common.go:95: >>>> Generation: 4 Run: 47
INFO: 13:51:26 common.go:95: >>>> Generation: 5 Run: 47
INFO: 13:51:26 common.go:95: >>>> Generation: 6 Run: 47
INFO: 13:51:26 common.go:95: >>>> Generation: 7 Run: 47
INFO: 13:51:26 common.go:95: >>>> Generation: 8 Run: 47
INFO: 13:51:26 common.go:95: >>>> Generation: 9 Run: 47
INFO: 13:51:26 common.go:95: >>>> Generation: 10 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 11 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 12 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 13 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 14 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 15 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 16 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 17 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 18 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 19 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 20 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 21 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 22 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 23 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 24 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 25 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 26 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 27 Run: 47
```

[illegible]



```
INFO: 13:51:27 common.go:95: >>>> Generation: 63 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 64 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 65 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 66 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 67 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 68 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 69 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 70 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 71 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 72 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 73 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 74 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 75 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 76 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 77 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 78 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 79 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 80 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 81 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 82 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 83 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 84 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 85 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 86 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 87 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 88 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 89 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 90 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 91 Run: 47
INFO: 13:51:27 common.go:95: >>>> Generation: 92 Run: 47
INFO: 13:51:27 XOR.go:162: >>>> Output activations: [9.348589e-15 1.000000e+00 9.999996e-01 1.693048e-10]
INFO: 13:51:27 XOR.go:162: >>>> Output activations: [1.153105e-10 1.000000e+00 9.999996e-01 1.581010e-10]
INFO: 13:51:27 XOR.go:90: Generation #92 winner dumped to: ./out/xor/47/xor_winner_11-25
INFO: 13:51:27 common.go:124: >>>> The winner organism found in [92] generation, fitness: 15.999997
<<<<<
```

```
INFO: 13:51:27 common.go:60:
>>>> Spawning new population
INFO: 13:51:27 common.go:66: OK <<<<
INFO: 13:51:27 common.go:68: >>>> Verifying spawned population
INFO: 13:51:27 common.go:74: OK <<<<
INFO: 13:51:27 common.go:95: >>>> Generation: 0 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 1 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 2 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 3 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 4 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 5 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 6 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 7 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 8 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 9 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 10 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 11 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 12 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 13 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 14 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 15 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 16 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 17 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 18 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 19 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 20 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 21 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 22 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 23 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 24 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 25 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 26 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 27 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 28 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 29 Run: 48
```

[illegible]

```
INFO: 13:51:27 common.go:95: >>>> Generation: 65 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 66 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 67 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 68 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 69 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 70 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 71 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 72 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 73 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 74 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 75 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 76 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 77 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 78 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 79 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 80 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 81 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 82 Run: 48
INFO: 13:51:27 common.go:95: >>>> Generation: 83 Run: 48
INFO: 13:51:27 XOR.go:162: >>>> Output activations: [2.439785e-15 1.000000e+00 1.000000e+00 4.739252e-03]
INFO: 13:51:27 XOR.go:90: Generation #83 winner dumped to: ./out/xor/48/xor_winner_10-22
INFO: 13:51:27 common.go:124: >>>> The winner organism found in [83] generation, fitness: 15.962108
<<<<<
INFO: 13:51:27 common.go:60:
>>>> Spawning new population
INFO: 13:51:27 common.go:66: OK <<<<<
INFO: 13:51:27 common.go:68: >>>> Verifying spawned population
INFO: 13:51:27 common.go:74: OK <<<<<
INFO: 13:51:27 common.go:95: >>>> Generation: 0 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 1 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 2 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 3 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 4 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 5 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 6 Run: 49
```

```
INFO: 13:51:27 common.go:95: >>>> Generation: 7 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 8 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 9 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 10 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 11 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 12 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 13 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 14 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 15 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 16 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 17 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 18 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 19 Run: 49
INFO: 13:51:27 common.go:95: >>>> Generation: 20 Run: 49
INFO: 13:51:28 common.go:95: >>>> Generation: 21 Run: 49
INFO: 13:51:28 common.go:95: >>>> Generation: 22 Run: 49
INFO: 13:51:28 common.go:95: >>>> Generation: 23 Run: 49
INFO: 13:51:28 common.go:95: >>>> Generation: 24 Run: 49
INFO: 13:51:28 common.go:95: >>>> Generation: 25 Run: 49
INFO: 13:51:28 common.go:95: >>>> Generation: 26 Run: 49
INFO: 13:51:28 common.go:95: >>>> Generation: 27 Run: 49
INFO: 13:51:28 XOR.go:162: >>>> Output activations: [1.318926e-06 9.865236e-01 9.999999e-01 7.772774e-04]
INFO: 13:51:28 XOR.go:90: Generation #27 winner dumped to: ./out/xor/49/xor_winner_6-9
INFO: 13:51:28 common.go:124: >>>> The winner organism found in [27] generation, fitness: 15.886163
<<<<<
INFO: 13:51:28 common.go:60:
>>>>> Spawning new population
INFO: 13:51:28 common.go:66: OK <<<<<
INFO: 13:51:28 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:28 common.go:74: OK <<<<<
INFO: 13:51:28 common.go:95: >>>>> Generation: 0 Run: 50
INFO: 13:51:28 common.go:95: >>>>> Generation: 1 Run: 50
INFO: 13:51:28 common.go:95: >>>>> Generation: 2 Run: 50
INFO: 13:51:28 common.go:95: >>>>> Generation: 3 Run: 50
INFO: 13:51:28 common.go:95: >>>>> Generation: 4 Run: 50
```

[illegible]

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INFO: 13:51:28 common.go:95: >>>> Generation: 40 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 41 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 42 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 43 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 44 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 45 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 46 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 47 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 48 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 49 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 50 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 51 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 52 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 53 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 54 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 55 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 56 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 57 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 58 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 59 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 60 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 61 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 62 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 63 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 64 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 65 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 66 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 67 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 68 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 69 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 70 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 71 Run: 50
INFO: 13:51:28 common.go:95: >>>> Generation: 72 Run: 50
INFO: 13:51:28 XOR.go:162: >>>> Output activations: [2.723362e-03 9.999998e-01 1.000000e+00 1.030779e-13]
INFO: 13:51:28 XOR.go:162: >>>> Output activations: [6.412667e-06 1.000000e+00 9.999998e-01 9.894912e-11]
```

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INFO: 13:51:28 XOR.go:90: Generation #72 winner dumped to: ./out/xor/50/xor_winner_7-17
INFO: 13:51:28 common.go:124: >>>> The winner organism found in [72] generation, fitness: 15.999947
<<<<<
INFO: 13:51:28 common.go:60:
>>>> Spawning new population
INFO: 13:51:28 common.go:66: OK <<<<<
INFO: 13:51:28 common.go:68: >>>> Verifying spawned population
INFO: 13:51:28 common.go:74: OK <<<<<
INFO: 13:51:28 common.go:95: >>>> Generation: 0 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 1 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 2 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 3 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 4 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 5 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 6 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 7 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 8 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 9 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 10 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 11 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 12 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 13 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 14 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 15 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 16 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 17 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 18 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 19 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 20 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 21 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 22 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 23 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 24 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 25 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 26 Run: 51
```



```
INFO: 13:51:28 common.go:95: >>>> Generation: 27 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 28 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 29 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 30 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 31 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 32 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 33 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 34 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 35 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 36 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 37 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 38 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 39 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 40 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 41 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 42 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 43 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 44 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 45 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 46 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 47 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 48 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 49 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 50 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 51 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 52 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 53 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 54 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 55 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 56 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 57 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 58 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 59 Run: 51
INFO: 13:51:28 common.go:95: >>>> Generation: 60 Run: 51
INFO: 13:51:28 XOR.go:162: >>>> Output activations: [3.491665e-27 9.999937e-01 1.000000e+00 2.011129e-14]
```

```
INFO: 13:51:28 XOR.go:90: Generation #60 winner dumped to: ./out/xor/51/xor_winner_10-23
INFO: 13:51:28 common.go:124: >>>> The winner organism found in [60] generation, fitness: 15.999950
<<<<<
INFO: 13:51:28 common.go:60:
>>>> Spawning new population
INFO: 13:51:28 common.go:66: OK <<<<<
INFO: 13:51:28 common.go:68: >>>> Verifying spawned population
INFO: 13:51:28 common.go:74: OK <<<<<
INFO: 13:51:28 common.go:95: >>>> Generation: 0 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 1 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 2 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 3 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 4 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 5 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 6 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 7 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 8 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 9 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 10 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 11 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 12 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 13 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 14 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 15 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 16 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 17 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 18 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 19 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 20 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 21 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 22 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 23 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 24 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 25 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 26 Run: 52
```

```
INFO: 13:51:28 common.go:95: >>>> Generation: 27 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 28 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 29 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 30 Run: 52
INFO: 13:51:28 common.go:95: >>>> Generation: 31 Run: 52
INFO: 13:51:28 XOR.go:162: >>>> Output activations: [1.972513e-05 9.664673e-01 9.999999e-01 1.591245e-04]
INFO: 13:51:28 XOR.go:58: Dumped optimal genome to: ./out/xor/52/xor_optimal_5-7
INFO: 13:51:28 XOR.go:90: Generation #31 winner dumped to: ./out/xor/52/xor_winner_5-7
INFO: 13:51:28 common.go:124: >>>> The winner organism found in [31] generation, fitness: 15.731443
<<<<<
INFO: 13:51:28 common.go:60:
>>>> Spawning new population
INFO: 13:51:28 common.go:66: OK <<<<<
INFO: 13:51:28 common.go:68: >>>> Verifying spawned population
INFO: 13:51:28 common.go:74: OK <<<<<
INFO: 13:51:28 common.go:95: >>>> Generation: 0 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 1 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 2 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 3 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 4 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 5 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 6 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 7 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 8 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 9 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 10 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 11 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 12 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 13 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 14 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 15 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 16 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 17 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 18 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 19 Run: 53
```

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INFO: 13:51:28 common.go:95: >>>> Generation: 20 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 21 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 22 Run: 53
INFO: 13:51:28 common.go:95: >>>> Generation: 23 Run: 53
INFO: 13:51:28 XOR.go:162: >>>> Output activations: [2.039692e-06 9.579684e-01 1.000000e+00 1.796867e-03]
INFO: 13:51:28 XOR.go:90: Generation #23 winner dumped to: ./out/xor/53/xor_winner_6-10
INFO: 13:51:28 common.go:124: >>>> The winner organism found in [23] generation, fitness: 15.651277
<<<<<
INFO: 13:51:28 common.go:60:
>>>> Spawning new population
INFO: 13:51:28 common.go:66: OK <<<<<
INFO: 13:51:28 common.go:68: >>>> Verifying spawned population
INFO: 13:51:28 common.go:74: OK <<<<<
INFO: 13:51:28 common.go:95: >>>> Generation: 0 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 1 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 2 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 3 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 4 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 5 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 6 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 7 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 8 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 9 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 10 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 11 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 12 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 13 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 14 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 15 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 16 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 17 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 18 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 19 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 20 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 21 Run: 54
```

```
INFO: 13:51:28 common.go:95: >>>> Generation: 22 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 23 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 24 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 25 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 26 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 27 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 28 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 29 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 30 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 31 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 32 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 33 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 34 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 35 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 36 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 37 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 38 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 39 Run: 54
INFO: 13:51:28 common.go:95: >>>> Generation: 40 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 41 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 42 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 43 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 44 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 45 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 46 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 47 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 48 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 49 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 50 Run: 54
INFO: 13:51:29 common.go:95: >>>> Generation: 51 Run: 54
INFO: 13:51:29 XOR.go:162: >>>> Output activations: [4.421681e-15 1.000000e+00 9.995362e-01 1.065551e-16]
INFO: 13:51:29 XOR.go:90: Generation #51 winner dumped to: ./out/xor/54/xor_winner_7-14
INFO: 13:51:29 common.go:124: >>>> The winner organism found in [51] generation, fitness: 15.996290
<<<<<
INFO: 13:51:29 common.go:60:
```

```
>>>> Spawning new population
INFO: 13:51:29 common.go:66: OK <<<<
INFO: 13:51:29 common.go:68: >>>> Verifying spawned population
INFO: 13:51:29 common.go:74: OK <<<<
INFO: 13:51:29 common.go:95: >>>> Generation: 0 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 1 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 2 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 3 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 4 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 5 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 6 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 7 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 8 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 9 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 10 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 11 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 12 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 13 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 14 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 15 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 16 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 17 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 18 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 19 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 20 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 21 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 22 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 23 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 24 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 25 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 26 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 27 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 28 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 29 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 30 Run: 55
```

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INFO: 13:51:29 common.go:95: >>>> Generation: 31 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 32 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 33 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 34 Run: 55
INFO: 13:51:29 common.go:95: >>>> Generation: 35 Run: 55
INFO: 13:51:29 XOR.go:162: >>>> Output activations: [5.084241e-07 9.932756e-01 9.997984e-01 2.408040e-03]
INFO: 13:51:29 XOR.go:90: Generation #35 winner dumped to: ./out/xor/55/xor_winner_7-13
INFO: 13:51:29 common.go:124: >>>> The winner organism found in [35] generation, fitness: 15.925410
<<<<<
INFO: 13:51:29 common.go:60:
>>>> Spawning new population
INFO: 13:51:29 common.go:66: OK <<<<<
INFO: 13:51:29 common.go:68: >>>> Verifying spawned population
INFO: 13:51:29 common.go:74: OK <<<<<
INFO: 13:51:29 common.go:95: >>>> Generation: 0 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 1 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 2 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 3 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 4 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 5 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 6 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 7 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 8 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 9 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 10 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 11 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 12 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 13 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 14 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 15 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 16 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 17 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 18 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 19 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 20 Run: 56
```

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INFO: 13:51:29 common.go:95: >>>> Generation: 21 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 22 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 23 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 24 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 25 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 26 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 27 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 28 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 29 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 30 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 31 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 32 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 33 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 34 Run: 56
INFO: 13:51:29 common.go:95: >>>> Generation: 35 Run: 56
INFO: 13:51:29 XOR.go:162: >>>> Output activations: [8.283783e-04 9.815770e-01 9.989734e-01 6.252995e-03]
INFO: 13:51:29 XOR.go:90: Generation #35 winner dumped to: ./out/xor/56/xor_winner_9-18
INFO: 13:51:29 common.go:124: >>>> The winner organism found in [35] generation, fitness: 15.788456
<<<<<
INFO: 13:51:29 common.go:60:
>>>> Spawning new population
INFO: 13:51:29 common.go:66: OK <<<<<
INFO: 13:51:29 common.go:68: >>>> Verifying spawned population
INFO: 13:51:29 common.go:74: OK <<<<<
INFO: 13:51:29 common.go:95: >>>> Generation: 0 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 1 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 2 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 3 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 4 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 5 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 6 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 7 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 8 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 9 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 10 Run: 57
```



[illegible]

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INFO: 13:51:29 common.go:95: >>>> Generation: 46 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 47 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 48 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 49 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 50 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 51 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 52 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 53 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 54 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 55 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 56 Run: 57
INFO: 13:51:29 common.go:95: >>>> Generation: 57 Run: 57
INFO: 13:51:29 XOR.go:162: >>>> Output activations: [6.075649e-04 9.999953e-01 9.655402e-01 3.478594e-04]
INFO: 13:51:29 XOR.go:90: Generation #57 winner dumped to: ./out/xor/57/xor_winner_12-22
INFO: 13:51:29 common.go:124: >>>> The winner organism found in [57] generation, fitness: 15.717895
<<<<<
INFO: 13:51:29 common.go:60:
>>>>> Spawning new population
INFO: 13:51:29 common.go:66: OK <<<<<
INFO: 13:51:29 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:29 common.go:74: OK <<<<<
INFO: 13:51:29 common.go:95: >>>>> Generation: 0 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 1 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 2 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 3 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 4 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 5 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 6 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 7 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 8 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 9 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 10 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 11 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 12 Run: 58
INFO: 13:51:29 common.go:95: >>>>> Generation: 13 Run: 58
```

```
INFO: 13:51:29 common.go:95: >>>> Generation: 14 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 15 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 16 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 17 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 18 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 19 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 20 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 21 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 22 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 23 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 24 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 25 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 26 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 27 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 28 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 29 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 30 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 31 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 32 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 33 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 34 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 35 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 36 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 37 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 38 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 39 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 40 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 41 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 42 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 43 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 44 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 45 Run: 58
INFO: 13:51:29 common.go:95: >>>> Generation: 46 Run: 58
INFO: 13:51:29 XOR.go:162: >>>> Output activations: [2.435177e-04 9.999999e-01 9.424418e-01 3.688653e-03]
INFO: 13:51:29 XOR.go:162: >>>> Output activations: [4.329783e-28 9.999983e-01 9.937691e-01 4.717794e-03]
```

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INFO: 13:51:29 XOR.go:90: Generation #46 winner dumped to: ./out/xor/58/xor_winner_6-11
INFO: 13:51:29 common.go:124: >>>> The winner organism found in [46] generation, fitness: 15.912517
<<<<<
INFO: 13:51:29 common.go:60:
>>>> Spawning new population
INFO: 13:51:29 common.go:66: OK <<<<<
INFO: 13:51:29 common.go:68: >>>> Verifying spawned population
INFO: 13:51:29 common.go:74: OK <<<<<
INFO: 13:51:29 common.go:95: >>>> Generation: 0 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 1 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 2 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 3 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 4 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 5 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 6 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 7 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 8 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 9 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 10 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 11 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 12 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 13 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 14 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 15 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 16 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 17 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 18 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 19 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 20 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 21 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 22 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 23 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 24 Run: 59
INFO: 13:51:29 common.go:95: >>>> Generation: 25 Run: 59
INFO: 13:51:29 XOR.go:162: >>>> Output activations: [4.604632e-05 9.958783e-01 9.999982e-01 2.543207e-02]
```

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INFO: 13:51:29 XOR.go:90: Generation #25 winner dumped to: ./out/xor/59/xor_winner_6-10
INFO: 13:51:29 common.go:124: >>>> The winner organism found in [25] generation, fitness: 15.764063
<<<<<
INFO: 13:51:29 common.go:60:
>>>> Spawning new population
INFO: 13:51:29 common.go:66: OK <<<<<
INFO: 13:51:29 common.go:68: >>>> Verifying spawned population
INFO: 13:51:29 common.go:74: OK <<<<<
INFO: 13:51:29 common.go:95: >>>> Generation: 0 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 1 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 2 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 3 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 4 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 5 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 6 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 7 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 8 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 9 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 10 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 11 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 12 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 13 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 14 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 15 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 16 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 17 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 18 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 19 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 20 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 21 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 22 Run: 60
INFO: 13:51:29 common.go:95: >>>> Generation: 23 Run: 60
INFO: 13:51:30 common.go:95: >>>> Generation: 24 Run: 60
INFO: 13:51:30 common.go:95: >>>> Generation: 25 Run: 60
INFO: 13:51:30 common.go:95: >>>> Generation: 26 Run: 60
```

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INFO: 13:51:30 common.go:95: >>>> Generation: 27 Run: 60
INFO: 13:51:30 common.go:95: >>>> Generation: 28 Run: 60
INFO: 13:51:30 common.go:95: >>>> Generation: 29 Run: 60
INFO: 13:51:30 common.go:95: >>>> Generation: 30 Run: 60
INFO: 13:51:30 common.go:95: >>>> Generation: 31 Run: 60
INFO: 13:51:30 XOR.go:162: >>>> Output activations: [6.037021e-06 9.954760e-01 9.999401e-01 2.808836e-03]
INFO: 13:51:30 XOR.go:90: Generation #31 winner dumped to: ./out/xor/60/xor_winner_6-12
INFO: 13:51:30 common.go:124: >>>> The winner organism found in [31] generation, fitness: 15.940865
<<<<<
INFO: 13:51:30 common.go:60:
>>>> Spawning new population
INFO: 13:51:30 common.go:66: OK <<<<<
INFO: 13:51:30 common.go:68: >>>> Verifying spawned population
INFO: 13:51:30 common.go:74: OK <<<<<
INFO: 13:51:30 common.go:95: >>>> Generation: 0 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 1 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 2 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 3 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 4 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 5 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 6 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 7 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 8 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 9 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 10 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 11 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 12 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 13 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 14 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 15 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 16 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 17 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 18 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 19 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 20 Run: 61
```

```
INFO: 13:51:30 common.go:95: >>>> Generation: 21 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 22 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 23 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 24 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 25 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 26 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 27 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 28 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 29 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 30 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 31 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 32 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 33 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 34 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 35 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 36 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 37 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 38 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 39 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 40 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 41 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 42 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 43 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 44 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 45 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 46 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 47 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 48 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 49 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 50 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 51 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 52 Run: 61
INFO: 13:51:30 common.go:95: >>>> Generation: 53 Run: 61
INFO: 13:51:30 XOR.go:162: >>>> Output activations: [1.412966e-06 9.992526e-01 9.991957e-01 1.201896e-19]
INFO: 13:51:30 XOR.go:90: Generation #53 winner dumped to: ./out/xor/61/xor_winner_8-18
```

```
INFO: 13:51:30 common.go:124: >>>> The winner organism found in [53] generation, fitness: 15.987577
<<<<<
INFO: 13:51:30 common.go:60:
>>>> Spawning new population
INFO: 13:51:30 common.go:66: OK <<<<<
INFO: 13:51:30 common.go:68: >>>> Verifying spawned population
INFO: 13:51:30 common.go:74: OK <<<<<
INFO: 13:51:30 common.go:95: >>>> Generation: 0 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 1 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 2 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 3 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 4 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 5 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 6 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 7 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 8 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 9 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 10 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 11 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 12 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 13 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 14 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 15 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 16 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 17 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 18 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 19 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 20 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 21 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 22 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 23 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 24 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 25 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 26 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 27 Run: 62
```



```
INFO: 13:51:30 common.go:95: >>>> Generation: 28 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 29 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 30 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 31 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 32 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 33 Run: 62
INFO: 13:51:30 common.go:95: >>>> Generation: 34 Run: 62
INFO: 13:51:30 XOR.go:162: >>>> Output activations: [8.699362e-23 9.999903e-01 9.982589e-01 2.217587e-05]
INFO: 13:51:30 XOR.go:162: >>>> Output activations: [1.771257e-24 9.987065e-01 9.953040e-01 1.830280e-07]
INFO: 13:51:30 XOR.go:162: >>>> Output activations: [7.949607e-23 1.000000e+00 9.999929e-01 1.140378e-02]
INFO: 13:51:30 XOR.go:90: Generation #34 winner dumped to: ./out/xor/62/xor_winner_6-8
INFO: 13:51:30 common.go:124: >>>> The winner organism found in [34] generation, fitness: 15.985819
<<<<<
INFO: 13:51:30 common.go:60:
>>>> Spawning new population
INFO: 13:51:30 common.go:66: OK <<<<<
INFO: 13:51:30 common.go:68: >>>> Verifying spawned population
INFO: 13:51:30 common.go:74: OK <<<<<
INFO: 13:51:30 common.go:95: >>>> Generation: 0 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 1 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 2 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 3 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 4 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 5 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 6 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 7 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 8 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 9 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 10 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 11 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 12 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 13 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 14 Run: 63
INFO: 13:51:30 common.go:95: >>>> Generation: 15 Run: 63
INFO: 13:51:30 XOR.go:162: >>>> Output activations: [7.222004e-06 9.803493e-01 9.773268e-01 2.320071e-04]
```

```
INFO: 13:51:30 XOR.go:90: Generation #15 winner dumped to: ./out/xor/63/xor_winner_6-10
INFO: 13:51:30 common.go:124: >>>> The winner organism found in [15] generation, fitness: 15.661306
<<<<<
INFO: 13:51:30 common.go:60:
>>>> Spawning new population
INFO: 13:51:30 common.go:66: OK <<<<<
INFO: 13:51:30 common.go:68: >>>> Verifying spawned population
INFO: 13:51:30 common.go:74: OK <<<<<
INFO: 13:51:30 common.go:95: >>>> Generation: 0 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 1 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 2 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 3 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 4 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 5 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 6 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 7 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 8 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 9 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 10 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 11 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 12 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 13 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 14 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 15 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 16 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 17 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 18 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 19 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 20 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 21 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 22 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 23 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 24 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 25 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 26 Run: 64
```

[illegible]

```
INFO: 13:51:30 common.go:95: >>>> Generation: 62 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 63 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 64 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 65 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 66 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 67 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 68 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 69 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 70 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 71 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 72 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 73 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 74 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 75 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 76 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 77 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 78 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 79 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 80 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 81 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 82 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 83 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 84 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 85 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 86 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 87 Run: 64
INFO: 13:51:30 common.go:95: >>>> Generation: 88 Run: 64
INFO: 13:51:30 XOR.go:162: >>>> Output activations: [3.418657e-04 9.998912e-01 1.000000e+00 1.544909e-09]
INFO: 13:51:30 XOR.go:90: Generation #88 winner dumped to: ./out/xor/64/xor_winner_8-19
INFO: 13:51:30 common.go:124: >>>> The winner organism found in [88] generation, fitness: 15.996395
<<<<<
INFO: 13:51:30 common.go:60:
>>>>> Spawning new population
INFO: 13:51:30 common.go:66: OK <<<<<
INFO: 13:51:30 common.go:68: >>>>> Verifying spawned population
```

[illegible]

```
INFO: 13:51:31 common.go:95: >>>> Generation: 34 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 35 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 36 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 37 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 38 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 39 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 40 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 41 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 42 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 43 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 44 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 45 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 46 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 47 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 48 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 49 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 50 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 51 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 52 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 53 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 54 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 55 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 56 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 57 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 58 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 59 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 60 Run: 65
INFO: 13:51:31 common.go:95: >>>> Generation: 61 Run: 65
INFO: 13:51:31 XOR.go:162: >>>> Output activations: [1.299034e-15 9.995505e-01 9.996832e-01 3.867661e-05]
INFO: 13:51:31 XOR.go:58: Dumped optimal genome to: ./out/xor/65/xor_optimal_5-7
INFO: 13:51:31 XOR.go:90: Generation #61 winner dumped to: ./out/xor/65/xor_winner_5-7
INFO: 13:51:31 common.go:124: >>>> The winner organism found in [61] generation, fitness: 15.993561
<<<<<
INFO: 13:51:31 common.go:60:
>>>> Spawning new population
```

```
INFO: 13:51:31 common.go:66: OK <<<<<
INFO: 13:51:31 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:31 common.go:74: OK <<<<<
INFO: 13:51:31 common.go:95: >>>>> Generation: 0 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 1 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 2 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 3 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 4 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 5 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 6 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 7 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 8 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 9 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 10 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 11 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 12 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 13 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 14 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 15 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 16 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 17 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 18 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 19 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 20 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 21 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 22 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 23 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 24 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 25 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 26 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 27 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 28 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 29 Run: 66
INFO: 13:51:31 common.go:95: >>>>> Generation: 30 Run: 66
INFO: 13:51:31 XOR.go:162: >>>> Output activations: [6.020565e-03 9.963970e-01 9.809474e-01 1.595016e-03]
```

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INFO: 13:51:31 XOR.go:162: >>>> Output activations: [6.020565e-03 9.963970e-01 9.809474e-01 1.595016e-03]
INFO: 13:51:31 XOR.go:90: Generation #30 winner dumped to: ./out/xor/66/xor_winner_6-9
INFO: 13:51:31 common.go:124: >>>> The winner organism found in [30] generation, fitness: 15.758747
<<<<<
INFO: 13:51:31 common.go:60:
>>>>> Spawning new population
INFO: 13:51:31 common.go:66: OK <<<<<
INFO: 13:51:31 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:31 common.go:74: OK <<<<<
INFO: 13:51:31 common.go:95: >>>>> Generation: 0 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 1 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 2 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 3 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 4 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 5 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 6 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 7 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 8 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 9 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 10 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 11 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 12 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 13 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 14 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 15 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 16 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 17 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 18 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 19 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 20 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 21 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 22 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 23 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 24 Run: 67
INFO: 13:51:31 common.go:95: >>>>> Generation: 25 Run: 67
```



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INFO: 13:51:31 common.go:95: >>>> Generation: 26 Run: 67
INFO: 13:51:31 common.go:95: >>>> Generation: 27 Run: 67
INFO: 13:51:31 common.go:95: >>>> Generation: 28 Run: 67
INFO: 13:51:31 XOR.go:162: >>>> Output activations: [3.658091e-05 9.989304e-01 9.933754e-01 5.863803e-03]
INFO: 13:51:31 XOR.go:90: Generation #28 winner dumped to: ./out/xor/67/xor_winner_6-12
INFO: 13:51:31 common.go:124: >>>> The winner organism found in [28] generation, fitness: 15.891428
<<<<<
INFO: 13:51:31 common.go:60:
>>>> Spawning new population
INFO: 13:51:31 common.go:66: OK <<<<<
INFO: 13:51:31 common.go:68: >>>> Verifying spawned population
INFO: 13:51:31 common.go:74: OK <<<<<
INFO: 13:51:31 common.go:95: >>>> Generation: 0 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 1 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 2 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 3 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 4 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 5 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 6 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 7 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 8 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 9 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 10 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 11 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 12 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 13 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 14 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 15 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 16 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 17 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 18 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 19 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 20 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 21 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 22 Run: 68
```

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INFO: 13:51:31 common.go:95: >>>> Generation: 23 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 24 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 25 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 26 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 27 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 28 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 29 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 30 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 31 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 32 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 33 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 34 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 35 Run: 68
INFO: 13:51:31 common.go:95: >>>> Generation: 36 Run: 68
INFO: 13:51:31 XOR.go:162: >>>> Output activations: [2.318630e-10 9.999934e-01 9.977607e-01 5.213666e-02]
INFO: 13:51:31 XOR.go:90: Generation #36 winner dumped to: ./out/xor/68/xor_winner_8-15
INFO: 13:51:31 common.go:124: >>>> The winner organism found in [36] generation, fitness: 15.567897
<<<<<
INFO: 13:51:31 common.go:60:
>>>> Spawning new population
INFO: 13:51:31 common.go:66: OK <<<<<
INFO: 13:51:31 common.go:68: >>>> Verifying spawned population
INFO: 13:51:31 common.go:74: OK <<<<<
INFO: 13:51:31 common.go:95: >>>> Generation: 0 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 1 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 2 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 3 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 4 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 5 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 6 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 7 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 8 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 9 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 10 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 11 Run: 69
```

[illegible]

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INFO: 13:51:31 common.go:95: >>>> Generation: 47 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 48 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 49 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 50 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 51 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 52 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 53 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 54 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 55 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 56 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 57 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 58 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 59 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 60 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 61 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 62 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 63 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 64 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 65 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 66 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 67 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 68 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 69 Run: 69
INFO: 13:51:31 common.go:95: >>>> Generation: 70 Run: 69
INFO: 13:51:31 XOR.go:162: >>>> Output activations: [1.864473e-03 1.000000e+00 9.803212e-01 1.147915e-02]
INFO: 13:51:31 XOR.go:90: Generation #70 winner dumped to: ./out/xor/69/xor_winner_7-14
INFO: 13:51:31 common.go:124: >>>> The winner organism found in [70] generation, fitness: 15.736911
<<<<<
INFO: 13:51:31 common.go:60:
>>>>> Spawning new population
INFO: 13:51:31 common.go:66: OK <<<<<
INFO: 13:51:31 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:31 common.go:74: OK <<<<<
INFO: 13:51:31 common.go:95: >>>>> Generation: 0 Run: 70
INFO: 13:51:31 common.go:95: >>>>> Generation: 1 Run: 70
```

```
INFO: 13:51:31 common.go:95: >>>> Generation: 2 Run: 70
INFO: 13:51:31 common.go:95: >>>> Generation: 3 Run: 70
INFO: 13:51:31 common.go:95: >>>> Generation: 4 Run: 70
INFO: 13:51:31 common.go:95: >>>> Generation: 5 Run: 70
INFO: 13:51:31 common.go:95: >>>> Generation: 6 Run: 70
INFO: 13:51:31 common.go:95: >>>> Generation: 7 Run: 70
INFO: 13:51:31 common.go:95: >>>> Generation: 8 Run: 70
INFO: 13:51:31 common.go:95: >>>> Generation: 9 Run: 70
INFO: 13:51:31 common.go:95: >>>> Generation: 10 Run: 70
INFO: 13:51:31 common.go:95: >>>> Generation: 11 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 12 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 13 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 14 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 15 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 16 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 17 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 18 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 19 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 20 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 21 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 22 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 23 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 24 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 25 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 26 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 27 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 28 Run: 70
INFO: 13:51:32 common.go:95: >>>> Generation: 29 Run: 70
INFO: 13:51:32 XOR.go:162: >>>> Output activations: [3.751046e-03 9.972909e-01 9.997124e-01 1.263792e-04]
INFO: 13:51:32 XOR.go:90: Generation #29 winner dumped to: ./out/xor/70/xor_winner_6-9
INFO: 13:51:32 common.go:124: >>>> The winner organism found in [29] generation, fitness: 15.945054
<<<<<
INFO: 13:51:32 common.go:60:
>>>> Spawning new population
INFO: 13:51:32 common.go:66: OK <<<<<
```

```

INFO: 13:51:32 common.go:68: >>>> Verifying spawned population
INFO: 13:51:32 common.go:74: OK <<<<
INFO: 13:51:32 common.go:95: >>>> Generation: 0 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 1 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 2 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 3 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 4 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 5 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 6 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 7 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 8 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 9 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 10 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 11 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 12 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 13 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 14 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 15 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 16 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 17 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 18 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 19 Run: 71
INFO: 13:51:32 common.go:95: >>>> Generation: 20 Run: 71
INFO: 13:51:32 XOR.go:162: >>>> Output activations: [3.819795e-08 9.995098e-01 9.997406e-01 3.931875e-03]
INFO: 13:51:32 XOR.go:90: Generation #20 winner dumped to: ./out/xor/71/xor_winner_7-12
INFO: 13:51:32 common.go:124: >>>> The winner organism found in [20] generation, fitness: 15.962570
<<<<
INFO: 13:51:32 common.go:60:
>>>> Spawning new population
INFO: 13:51:32 common.go:66: OK <<<<
INFO: 13:51:32 common.go:68: >>>> Verifying spawned population
INFO: 13:51:32 common.go:74: OK <<<<
INFO: 13:51:32 common.go:95: >>>> Generation: 0 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 1 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 2 Run: 72

```

[illegible]

```
INFO: 13:51:32 common.go:95: >>>> Generation: 38 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 39 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 40 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 41 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 42 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 43 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 44 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 45 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 46 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 47 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 48 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 49 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 50 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 51 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 52 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 53 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 54 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 55 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 56 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 57 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 58 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 59 Run: 72
INFO: 13:51:32 common.go:95: >>>> Generation: 60 Run: 72
INFO: 13:51:32 XOR.go:162: >>>> Output activations: [1.044703e-05 9.999805e-01 9.908685e-01 2.239767e-03]
INFO: 13:51:32 XOR.go:90: Generation #60 winner dumped to: ./out/xor/72/xor_winner_7-18
INFO: 13:51:32 common.go:124: >>>> The winner organism found in [60] generation, fitness: 15.908920
<<<<<
INFO: 13:51:32 common.go:60:
>>>> Spawning new population
INFO: 13:51:32 common.go:66: OK <<<<<
INFO: 13:51:32 common.go:68: >>>> Verifying spawned population
INFO: 13:51:32 common.go:74: OK <<<<<
INFO: 13:51:32 common.go:95: >>>> Generation: 0 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 1 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 2 Run: 73
```



[illegible]

[illegible]

```
INFO: 13:51:32 common.go:95: >>>> Generation: 73 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 74 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 75 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 76 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 77 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 78 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 79 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 80 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 81 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 82 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 83 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 84 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 85 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 86 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 87 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 88 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 89 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 90 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 91 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 92 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 93 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 94 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 95 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 96 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 97 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 98 Run: 73
INFO: 13:51:32 common.go:95: >>>> Generation: 99 Run: 73
INFO: 13:51:32 common.go:60:
>>>> Spawning new population
INFO: 13:51:32 common.go:66: OK <<<<<
INFO: 13:51:32 common.go:68: >>>> Verifying spawned population
INFO: 13:51:32 common.go:74: OK <<<<<
INFO: 13:51:32 common.go:95: >>>> Generation: 0 Run: 74
INFO: 13:51:32 common.go:95: >>>> Generation: 1 Run: 74
INFO: 13:51:32 common.go:95: >>>> Generation: 2 Run: 74
```

[illegible]

```
INFO: 13:51:33 common.go:95: >>>> Generation: 38 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 39 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 40 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 41 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 42 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 43 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 44 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 45 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 46 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 47 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 48 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 49 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 50 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 51 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 52 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 53 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 54 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 55 Run: 74
INFO: 13:51:33 common.go:95: >>>> Generation: 56 Run: 74
INFO: 13:51:33 XOR.go:162: >>>> Output activations: [2.388344e-09 9.999622e-01 9.967452e-01 6.412913e-05]
INFO: 13:51:33 XOR.go:58: Dumped optimal genome to: ./out/xor/74/xor_optimal_5-7
INFO: 13:51:33 XOR.go:90: Generation #56 winner dumped to: ./out/xor/74/xor_winner_5-7
INFO: 13:51:33 common.go:124: >>>> The winner organism found in [56] generation, fitness: 15.973157
<<<<<
INFO: 13:51:33 common.go:60:
>>>>> Spawning new population
INFO: 13:51:33 common.go:66: OK <<<<<
INFO: 13:51:33 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:33 common.go:74: OK <<<<<
INFO: 13:51:33 common.go:95: >>>>> Generation: 0 Run: 75
INFO: 13:51:33 common.go:95: >>>>> Generation: 1 Run: 75
INFO: 13:51:33 common.go:95: >>>>> Generation: 2 Run: 75
INFO: 13:51:33 common.go:95: >>>>> Generation: 3 Run: 75
INFO: 13:51:33 common.go:95: >>>>> Generation: 4 Run: 75
INFO: 13:51:33 common.go:95: >>>>> Generation: 5 Run: 75
```

```
INFO: 13:51:33 common.go:95: >>>> Generation: 6 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 7 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 8 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 9 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 10 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 11 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 12 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 13 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 14 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 15 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 16 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 17 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 18 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 19 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 20 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 21 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 22 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 23 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 24 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 25 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 26 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 27 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 28 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 29 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 30 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 31 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 32 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 33 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 34 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 35 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 36 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 37 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 38 Run: 75
INFO: 13:51:33 common.go:95: >>>> Generation: 39 Run: 75
INFO: 13:51:33 XOR.go:162: >>>> Output activations: [4.782727e-11 9.773594e-01 1.000000e+00 4.675832e-05]
```

```
INFO: 13:51:33 XOR.go:90: Generation #39 winner dumped to: ./out/xor/75/xor_winner_6-11
INFO: 13:51:33 common.go:124: >>>> The winner organism found in [39] generation, fitness: 15.819016
<<<<<
INFO: 13:51:33 common.go:60:
>>>> Spawning new population
INFO: 13:51:33 common.go:66: OK <<<<<
INFO: 13:51:33 common.go:68: >>>> Verifying spawned population
INFO: 13:51:33 common.go:74: OK <<<<<
INFO: 13:51:33 common.go:95: >>>> Generation: 0 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 1 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 2 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 3 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 4 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 5 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 6 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 7 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 8 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 9 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 10 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 11 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 12 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 13 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 14 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 15 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 16 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 17 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 18 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 19 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 20 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 21 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 22 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 23 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 24 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 25 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 26 Run: 76
```

```
INFO: 13:51:33 common.go:95: >>>> Generation: 27 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 28 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 29 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 30 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 31 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 32 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 33 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 34 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 35 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 36 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 37 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 38 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 39 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 40 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 41 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 42 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 43 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 44 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 45 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 46 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 47 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 48 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 49 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 50 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 51 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 52 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 53 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 54 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 55 Run: 76
INFO: 13:51:33 common.go:95: >>>> Generation: 56 Run: 76
INFO: 13:51:33 XOR.go:162: >>>> Output activations: [7.262334e-03 1.000000e+00 9.999613e-01 1.796035e-02]
INFO: 13:51:33 XOR.go:90: Generation #56 winner dumped to: ./out/xor/76/xor_winner_7-13
INFO: 13:51:33 common.go:124: >>>> The winner organism found in [56] generation, fitness: 15.798547
<<<<<
INFO: 13:51:33 common.go:60:
```



```
>>>> Spawning new population
INFO: 13:51:33 common.go:66: OK <<<<
INFO: 13:51:33 common.go:68: >>>> Verifying spawned population
INFO: 13:51:33 common.go:74: OK <<<<
INFO: 13:51:33 common.go:95: >>>> Generation: 0 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 1 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 2 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 3 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 4 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 5 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 6 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 7 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 8 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 9 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 10 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 11 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 12 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 13 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 14 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 15 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 16 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 17 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 18 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 19 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 20 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 21 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 22 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 23 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 24 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 25 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 26 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 27 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 28 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 29 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 30 Run: 77
```

[illegible]

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INFO: 13:51:33 common.go:95: >>>> Generation: 66 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 67 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 68 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 69 Run: 77
INFO: 13:51:33 common.go:95: >>>> Generation: 70 Run: 77
INFO: 13:51:33 XOR.go:162: >>>> Output activations: [2.086795e-04 9.659580e-01 1.000000e+00 1.230786e-10]
INFO: 13:51:33 XOR.go:90: Generation #70 winner dumped to: ./out/xor/77/xor_winner_9-21
INFO: 13:51:33 common.go:124: >>>> The winner organism found in [70] generation, fitness: 15.727167
<<<<<
INFO: 13:51:33 common.go:60:
>>>> Spawning new population
INFO: 13:51:33 common.go:66: OK <<<<<
INFO: 13:51:33 common.go:68: >>>> Verifying spawned population
INFO: 13:51:33 common.go:74: OK <<<<<
INFO: 13:51:33 common.go:95: >>>> Generation: 0 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 1 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 2 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 3 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 4 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 5 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 6 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 7 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 8 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 9 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 10 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 11 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 12 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 13 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 14 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 15 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 16 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 17 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 18 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 19 Run: 78
INFO: 13:51:33 common.go:95: >>>> Generation: 20 Run: 78
```

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[illegible]

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INFO: 13:51:34 common.go:95: >>>> Generation: 91 Run: 78
INFO: 13:51:34 common.go:95: >>>> Generation: 92 Run: 78
INFO: 13:51:34 common.go:95: >>>> Generation: 93 Run: 78
INFO: 13:51:34 common.go:95: >>>> Generation: 94 Run: 78
INFO: 13:51:34 common.go:95: >>>> Generation: 95 Run: 78
INFO: 13:51:34 common.go:95: >>>> Generation: 96 Run: 78
INFO: 13:51:34 common.go:95: >>>> Generation: 97 Run: 78
INFO: 13:51:34 common.go:95: >>>> Generation: 98 Run: 78
INFO: 13:51:34 common.go:95: >>>> Generation: 99 Run: 78
INFO: 13:51:34 common.go:60:
>>>> Spawning new population
INFO: 13:51:34 common.go:66: OK <<<<<
INFO: 13:51:34 common.go:68: >>>> Verifying spawned population
INFO: 13:51:34 common.go:74: OK <<<<<
INFO: 13:51:34 common.go:95: >>>> Generation: 0 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 1 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 2 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 3 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 4 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 5 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 6 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 7 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 8 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 9 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 10 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 11 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 12 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 13 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 14 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 15 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 16 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 17 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 18 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 19 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 20 Run: 79
```

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[illegible]



```
INFO: 13:51:34 common.go:95: >>>> Generation: 91 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 92 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 93 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 94 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 95 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 96 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 97 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 98 Run: 79
INFO: 13:51:34 common.go:95: >>>> Generation: 99 Run: 79
INFO: 13:51:34 common.go:60:
>>>> Spawning new population
INFO: 13:51:34 common.go:66: OK <<<<<
INFO: 13:51:34 common.go:68: >>>> Verifying spawned population
INFO: 13:51:34 common.go:74: OK <<<<<
INFO: 13:51:34 common.go:95: >>>> Generation: 0 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 1 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 2 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 3 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 4 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 5 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 6 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 7 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 8 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 9 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 10 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 11 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 12 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 13 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 14 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 15 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 16 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 17 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 18 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 19 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 20 Run: 80
```

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INFO: 13:51:34 common.go:95: >>>> Generation: 21 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 22 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 23 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 24 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 25 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 26 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 27 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 28 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 29 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 30 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 31 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 32 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 33 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 34 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 35 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 36 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 37 Run: 80
INFO: 13:51:34 common.go:95: >>>> Generation: 38 Run: 80
INFO: 13:51:34 XOR.go:162: >>>> Output activations: [1.804196e-09 1.000000e+00 9.998254e-01 1.691321e-02]
INFO: 13:51:34 XOR.go:58: Dumped optimal genome to: ./out/xor/80/xor_optimal_5-7
INFO: 13:51:34 XOR.go:90: Generation #38 winner dumped to: ./out/xor/80/xor_winner_5-7
INFO: 13:51:34 common.go:124: >>>> The winner organism found in [38] generation, fitness: 15.863590
<<<<<
INFO: 13:51:34 common.go:60:
>>>> Spawning new population
INFO: 13:51:34 common.go:66: OK <<<<<
INFO: 13:51:34 common.go:68: >>>> Verifying spawned population
INFO: 13:51:34 common.go:74: OK <<<<<
INFO: 13:51:34 common.go:95: >>>> Generation: 0 Run: 81
INFO: 13:51:34 common.go:95: >>>> Generation: 1 Run: 81
INFO: 13:51:34 common.go:95: >>>> Generation: 2 Run: 81
INFO: 13:51:34 common.go:95: >>>> Generation: 3 Run: 81
INFO: 13:51:34 common.go:95: >>>> Generation: 4 Run: 81
INFO: 13:51:34 common.go:95: >>>> Generation: 5 Run: 81
INFO: 13:51:34 common.go:95: >>>> Generation: 6 Run: 81
```

[illegible]

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INFO: 13:51:35 common.go:95: >>>> Generation: 42 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 43 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 44 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 45 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 46 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 47 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 48 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 49 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 50 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 51 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 52 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 53 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 54 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 55 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 56 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 57 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 58 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 59 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 60 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 61 Run: 81
INFO: 13:51:35 common.go:95: >>>> Generation: 62 Run: 81
INFO: 13:51:35 XOR.go:162: >>>> Output activations: [2.569613e-02 1.000000e+00 1.000000e+00 1.767313e-08]
INFO: 13:51:35 XOR.go:90: Generation #62 winner dumped to: ./out/xor/81/xor_winner_8-21
INFO: 13:51:35 common.go:124: >>>> The winner organism found in [62] generation, fitness: 15.795091
<<<<<
INFO: 13:51:35 common.go:60:
>>>>> Spawning new population
INFO: 13:51:35 common.go:66: OK <<<<<
INFO: 13:51:35 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:35 common.go:74: OK <<<<<
INFO: 13:51:35 common.go:95: >>>>> Generation: 0 Run: 82
INFO: 13:51:35 common.go:95: >>>>> Generation: 1 Run: 82
INFO: 13:51:35 common.go:95: >>>>> Generation: 2 Run: 82
INFO: 13:51:35 common.go:95: >>>>> Generation: 3 Run: 82
INFO: 13:51:35 common.go:95: >>>>> Generation: 4 Run: 82
```

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INFO: 13:51:35 common.go:95: >>>> Generation: 5 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 6 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 7 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 8 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 9 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 10 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 11 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 12 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 13 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 14 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 15 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 16 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 17 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 18 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 19 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 20 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 21 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 22 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 23 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 24 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 25 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 26 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 27 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 28 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 29 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 30 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 31 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 32 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 33 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 34 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 35 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 36 Run: 82
INFO: 13:51:35 common.go:95: >>>> Generation: 37 Run: 82
INFO: 13:51:35 XOR.go:162: >>>> Output activations: [2.050792e-02 9.996876e-01 9.991255e-01 2.696979e-03]
INFO: 13:51:35 XOR.go:90: Generation #37 winner dumped to: ./out/xor/82/xor_winner_8-15
```

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INFO: 13:51:35 common.go:124: >>>> The winner organism found in [37] generation, fitness: 15.805461
<<<<<
INFO: 13:51:35 common.go:60:
>>>> Spawning new population
INFO: 13:51:35 common.go:66: OK <<<<<
INFO: 13:51:35 common.go:68: >>>> Verifying spawned population
INFO: 13:51:35 common.go:74: OK <<<<<
INFO: 13:51:35 common.go:95: >>>> Generation: 0 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 1 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 2 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 3 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 4 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 5 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 6 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 7 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 8 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 9 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 10 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 11 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 12 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 13 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 14 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 15 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 16 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 17 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 18 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 19 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 20 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 21 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 22 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 23 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 24 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 25 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 26 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 27 Run: 83
```

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INFO: 13:51:35 common.go:95: >>>> Generation: 28 Run: 83
INFO: 13:51:35 common.go:95: >>>> Generation: 29 Run: 83
INFO: 13:51:35 XOR.go:162: >>>> Output activations: [4.758381e-07 9.884576e-01 9.998438e-01 3.555454e-03]
INFO: 13:51:35 XOR.go:58: Dumped optimal genome to: ./out/xor/83/xor_optimal_5-7
INFO: 13:51:35 XOR.go:90: Generation #29 winner dumped to: ./out/xor/83/xor_winner_5-7
INFO: 13:51:35 common.go:124: >>>> The winner organism found in [29] generation, fitness: 15.878197
<<<<<
INFO: 13:51:35 common.go:60:
>>>> Spawning new population
INFO: 13:51:35 common.go:66: OK <<<<<
INFO: 13:51:35 common.go:68: >>>> Verifying spawned population
INFO: 13:51:35 common.go:74: OK <<<<<
INFO: 13:51:35 common.go:95: >>>> Generation: 0 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 1 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 2 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 3 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 4 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 5 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 6 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 7 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 8 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 9 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 10 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 11 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 12 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 13 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 14 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 15 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 16 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 17 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 18 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 19 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 20 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 21 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 22 Run: 84
```

[illegible]



[illegible]

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INFO: 13:51:35 common.go:95: >>>> Generation: 93 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 94 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 95 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 96 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 97 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 98 Run: 84
INFO: 13:51:35 common.go:95: >>>> Generation: 99 Run: 84
INFO: 13:51:35 common.go:60:
>>>> Spawning new population
INFO: 13:51:35 common.go:66: OK <<<<
INFO: 13:51:35 common.go:68: >>>> Verifying spawned population
INFO: 13:51:35 common.go:74: OK <<<<
INFO: 13:51:35 common.go:95: >>>> Generation: 0 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 1 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 2 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 3 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 4 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 5 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 6 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 7 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 8 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 9 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 10 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 11 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 12 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 13 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 14 Run: 85
INFO: 13:51:35 common.go:95: >>>> Generation: 15 Run: 85
INFO: 13:51:36 common.go:95: >>>> Generation: 16 Run: 85
INFO: 13:51:36 common.go:95: >>>> Generation: 17 Run: 85
INFO: 13:51:36 common.go:95: >>>> Generation: 18 Run: 85
INFO: 13:51:36 common.go:95: >>>> Generation: 19 Run: 85
INFO: 13:51:36 common.go:95: >>>> Generation: 20 Run: 85
INFO: 13:51:36 common.go:95: >>>> Generation: 21 Run: 85
INFO: 13:51:36 common.go:95: >>>> Generation: 22 Run: 85
```

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INFO: 13:51:36 common.go:95: >>>> Generation: 23 Run: 85
INFO: 13:51:36 common.go:95: >>>> Generation: 24 Run: 85
INFO: 13:51:36 XOR.go:162: >>>> Output activations: [6.866040e-04 9.693309e-01 9.992682e-01 2.946083e-04]
INFO: 13:51:36 XOR.go:58: Dumped optimal genome to: ./out/xor/85/xor_optimal_5-7
INFO: 13:51:36 XOR.go:90: Generation #24 winner dumped to: ./out/xor/85/xor_winner_5-7
INFO: 13:51:36 common.go:124: >>>> The winner organism found in [24] generation, fitness: 15.741992
<<<<<
INFO: 13:51:36 common.go:60:
>>>> Spawning new population
INFO: 13:51:36 common.go:66: OK <<<<<
INFO: 13:51:36 common.go:68: >>>> Verifying spawned population
INFO: 13:51:36 common.go:74: OK <<<<<
INFO: 13:51:36 common.go:95: >>>> Generation: 0 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 1 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 2 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 3 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 4 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 5 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 6 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 7 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 8 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 9 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 10 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 11 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 12 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 13 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 14 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 15 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 16 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 17 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 18 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 19 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 20 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 21 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 22 Run: 86
```

[illegible]

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INFO: 13:51:36 common.go:95: >>>> Generation: 58 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 59 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 60 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 61 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 62 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 63 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 64 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 65 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 66 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 67 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 68 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 69 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 70 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 71 Run: 86
INFO: 13:51:36 common.go:95: >>>> Generation: 72 Run: 86
INFO: 13:51:36 XOR.go:162: >>>> Output activations: [5.952754e-03 9.865796e-01 9.995537e-01 1.845485e-02]
INFO: 13:51:36 XOR.go:90: Generation #72 winner dumped to: ./out/xor/86/xor_winner_9-25
INFO: 13:51:36 common.go:124: >>>> The winner organism found in [72] generation, fitness: 15.695270
<<<<<
INFO: 13:51:36 common.go:60:
>>>> Spawning new population
INFO: 13:51:36 common.go:66: OK <<<<<
INFO: 13:51:36 common.go:68: >>>> Verifying spawned population
INFO: 13:51:36 common.go:74: OK <<<<<
INFO: 13:51:36 common.go:95: >>>> Generation: 0 Run: 87
INFO: 13:51:36 common.go:95: >>>> Generation: 1 Run: 87
INFO: 13:51:36 common.go:95: >>>> Generation: 2 Run: 87
INFO: 13:51:36 common.go:95: >>>> Generation: 3 Run: 87
INFO: 13:51:36 common.go:95: >>>> Generation: 4 Run: 87
INFO: 13:51:36 common.go:95: >>>> Generation: 5 Run: 87
INFO: 13:51:36 common.go:95: >>>> Generation: 6 Run: 87
INFO: 13:51:36 common.go:95: >>>> Generation: 7 Run: 87
INFO: 13:51:36 common.go:95: >>>> Generation: 8 Run: 87
INFO: 13:51:36 common.go:95: >>>> Generation: 9 Run: 87
INFO: 13:51:36 common.go:95: >>>> Generation: 10 Run: 87
```

[illegible]

[illegible]

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INFO: 13:51:36 common.go:95: >>>> Generation: 81 Run: 87
INFO: 13:51:36 XOR.go:162: >>>> Output activations: [6.397513e-12 9.972824e-01 1.000000e+00 1.841034e-03]
INFO: 13:51:36 XOR.go:90: Generation #81 winner dumped to: ./out/xor/87/xor_winner_7-14
INFO: 13:51:36 common.go:124: >>>> The winner organism found in [81] generation, fitness: 15.963552
<<<<<
INFO: 13:51:36 common.go:60:
>>>>> Spawning new population
INFO: 13:51:36 common.go:66: OK <<<<<
INFO: 13:51:36 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:36 common.go:74: OK <<<<<
INFO: 13:51:36 common.go:95: >>>>> Generation: 0 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 1 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 2 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 3 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 4 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 5 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 6 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 7 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 8 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 9 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 10 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 11 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 12 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 13 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 14 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 15 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 16 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 17 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 18 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 19 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 20 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 21 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 22 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 23 Run: 88
INFO: 13:51:36 common.go:95: >>>>> Generation: 24 Run: 88
```



```
INFO: 13:51:36 XOR.go:162: >>>> Output activations: [5.571225e-03 9.743453e-01 9.908299e-01 2.417823e-03]
INFO: 13:51:36 XOR.go:90: Generation #24 winner dumped to: ./out/xor/88/xor_winner_6-12
INFO: 13:51:36 common.go:124: >>>> The winner organism found in [24] generation, fitness: 15.659323
<<<<<
INFO: 13:51:36 common.go:60:
>>>>> Spawning new population
INFO: 13:51:36 common.go:66: OK <<<<<
INFO: 13:51:36 common.go:68: >>>>> Verifying spawned population
INFO: 13:51:36 common.go:74: OK <<<<<
INFO: 13:51:36 common.go:95: >>>>> Generation: 0 Run: 89
INFO: 13:51:36 common.go:95: >>>>> Generation: 1 Run: 89
INFO: 13:51:36 common.go:95: >>>>> Generation: 2 Run: 89
INFO: 13:51:36 common.go:95: >>>>> Generation: 3 Run: 89
INFO: 13:51:36 common.go:95: >>>>> Generation: 4 Run: 89
INFO: 13:51:36 common.go:95: >>>>> Generation: 5 Run: 89
INFO: 13:51:36 common.go:95: >>>>> Generation: 6 Run: 89
INFO: 13:51:36 common.go:95: >>>>> Generation: 7 Run: 89
INFO: 13:51:36 common.go:95: >>>>> Generation: 8 Run: 89
INFO: 13:51:36 common.go:95: >>>>> Generation: 9 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 10 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 11 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 12 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 13 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 14 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 15 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 16 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 17 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 18 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 19 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 20 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 21 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 22 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 23 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 24 Run: 89
INFO: 13:51:37 common.go:95: >>>>> Generation: 25 Run: 89
```

[illegible]

[illegible]

```
INFO: 13:51:37 common.go:95: >>>> Generation: 96 Run: 89
INFO: 13:51:37 common.go:95: >>>> Generation: 97 Run: 89
INFO: 13:51:37 common.go:95: >>>> Generation: 98 Run: 89
INFO: 13:51:37 common.go:95: >>>> Generation: 99 Run: 89
INFO: 13:51:37 common.go:60:
>>>> Spawning new population
INFO: 13:51:37 common.go:66: OK <<<<<
INFO: 13:51:37 common.go:68: >>>> Verifying spawned population
INFO: 13:51:37 common.go:74: OK <<<<<
INFO: 13:51:37 common.go:95: >>>> Generation: 0 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 1 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 2 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 3 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 4 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 5 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 6 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 7 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 8 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 9 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 10 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 11 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 12 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 13 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 14 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 15 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 16 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 17 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 18 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 19 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 20 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 21 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 22 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 23 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 24 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 25 Run: 90
```

[illegible]

```
INFO: 13:51:37 common.go:95: >>>> Generation: 61 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 62 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 63 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 64 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 65 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 66 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 67 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 68 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 69 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 70 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 71 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 72 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 73 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 74 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 75 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 76 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 77 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 78 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 79 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 80 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 81 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 82 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 83 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 84 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 85 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 86 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 87 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 88 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 89 Run: 90
INFO: 13:51:37 common.go:95: >>>> Generation: 90 Run: 90
INFO: 13:51:37 XOR.go:162: >>>> Output activations: [9.747507e-11 9.974765e-01 1.000000e+00 4.518477e-10]
INFO: 13:51:37 XOR.go:90: Generation #90 winner dumped to: ./out/xor/90/xor_winner_6-12
INFO: 13:51:37 common.go:124: >>>> The winner organism found in [90] generation, fitness: 15.979819
<<<<<
INFO: 13:51:37 common.go:60:
```

```
>>>> Spawning new population
INFO: 13:51:37 common.go:66: OK <<<<
INFO: 13:51:37 common.go:68: >>>> Verifying spawned population
INFO: 13:51:37 common.go:74: OK <<<<
INFO: 13:51:37 common.go:95: >>>> Generation: 0 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 1 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 2 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 3 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 4 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 5 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 6 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 7 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 8 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 9 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 10 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 11 Run: 91
INFO: 13:51:37 common.go:95: >>>> Generation: 12 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 13 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 14 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 15 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 16 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 17 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 18 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 19 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 20 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 21 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 22 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 23 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 24 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 25 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 26 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 27 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 28 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 29 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 30 Run: 91
```

[illegible]



```
INFO: 13:51:38 common.go:95: >>>> Generation: 66 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 67 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 68 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 69 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 70 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 71 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 72 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 73 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 74 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 75 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 76 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 77 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 78 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 79 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 80 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 81 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 82 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 83 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 84 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 85 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 86 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 87 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 88 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 89 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 90 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 91 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 92 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 93 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 94 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 95 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 96 Run: 91
INFO: 13:51:38 common.go:95: >>>> Generation: 97 Run: 91
INFO: 13:51:38 XOR.go:162: >>>> Output activations: [1.629121e-29 1.000000e+00 9.999904e-01 1.857926e-08]
INFO: 13:51:38 XOR.go:90: Generation #97 winner dumped to: ./out/xor/91/xor_winner_9-21
INFO: 13:51:38 common.go:124: >>>> The winner organism found in [97] generation, fitness: 15.999923
```

<<<<<

INFO: 13:51:38 common.go:60:

>>>>> Spawning new population

INFO: 13:51:38 common.go:66: OK <<<<<

INFO: 13:51:38 common.go:68: >>>>> Verifying spawned population

INFO: 13:51:38 common.go:74: OK <<<<<

INFO: 13:51:38 common.go:95: >>>>> Generation: 0 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 1 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 2 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 3 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 4 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 5 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 6 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 7 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 8 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 9 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 10 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 11 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 12 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 13 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 14 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 15 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 16 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 17 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 18 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 19 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 20 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 21 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 22 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 23 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 24 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 25 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 26 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 27 Run: 92

INFO: 13:51:38 common.go:95: >>>>> Generation: 28 Run: 92

[illegible]

```
INFO: 13:51:38 common.go:95: >>>> Generation: 64 Run: 92
INFO: 13:51:38 common.go:95: >>>> Generation: 65 Run: 92
INFO: 13:51:38 common.go:95: >>>> Generation: 66 Run: 92
INFO: 13:51:38 XOR.go:162: >>>> Output activations: [1.055319e-02 9.877704e-01 9.946084e-01 2.404602e-12]
INFO: 13:51:38 XOR.go:90: Generation #66 winner dumped to: ./out/xor/92/xor_winner_7-13
INFO: 13:51:38 common.go:124: >>>> The winner organism found in [66] generation, fitness: 15.775399
<<<<<
INFO: 13:51:38 common.go:60:
>>>> Spawning new population
INFO: 13:51:38 common.go:66: OK <<<<<
INFO: 13:51:38 common.go:68: >>>> Verifying spawned population
INFO: 13:51:38 common.go:74: OK <<<<<
INFO: 13:51:38 common.go:95: >>>> Generation: 0 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 1 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 2 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 3 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 4 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 5 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 6 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 7 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 8 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 9 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 10 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 11 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 12 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 13 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 14 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 15 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 16 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 17 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 18 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 19 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 20 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 21 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 22 Run: 93
```

```
INFO: 13:51:38 common.go:95: >>>> Generation: 23 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 24 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 25 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 26 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 27 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 28 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 29 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 30 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 31 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 32 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 33 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 34 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 35 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 36 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 37 Run: 93
INFO: 13:51:38 common.go:95: >>>> Generation: 38 Run: 93
INFO: 13:51:38 XOR.go:162: >>>> Output activations: [1.696483e-03 9.680871e-01 9.999843e-01 3.703191e-04]
INFO: 13:51:38 XOR.go:90: Generation #38 winner dumped to: ./out/xor/93/xor_winner_6-10
INFO: 13:51:38 common.go:124: >>>> The winner organism found in [38] generation, fitness: 15.729192
<<<<<
INFO: 13:51:38 common.go:60:
>>>> Spawning new population
INFO: 13:51:38 common.go:66: OK <<<<<
INFO: 13:51:38 common.go:68: >>>> Verifying spawned population
INFO: 13:51:38 common.go:74: OK <<<<<
INFO: 13:51:38 common.go:95: >>>> Generation: 0 Run: 94
INFO: 13:51:38 common.go:95: >>>> Generation: 1 Run: 94
INFO: 13:51:38 common.go:95: >>>> Generation: 2 Run: 94
INFO: 13:51:38 common.go:95: >>>> Generation: 3 Run: 94
INFO: 13:51:38 common.go:95: >>>> Generation: 4 Run: 94
INFO: 13:51:38 common.go:95: >>>> Generation: 5 Run: 94
INFO: 13:51:38 common.go:95: >>>> Generation: 6 Run: 94
INFO: 13:51:38 common.go:95: >>>> Generation: 7 Run: 94
INFO: 13:51:38 common.go:95: >>>> Generation: 8 Run: 94
INFO: 13:51:38 common.go:95: >>>> Generation: 9 Run: 94
```

[illegible]

```
INFO: 13:51:39 common.go:95: >>>> Generation: 45 Run: 94
INFO: 13:51:39 common.go:95: >>>> Generation: 46 Run: 94
INFO: 13:51:39 XOR.go:162: >>>> Output activations: [6.381515e-16 9.983563e-01 9.777940e-01 4.585109e-03]
INFO: 13:51:39 XOR.go:90: Generation #46 winner dumped to: ./out/xor/94/xor_winner_9-19
INFO: 13:51:39 common.go:124: >>>> The winner organism found in [46] generation, fitness: 15.773330
<<<<<
INFO: 13:51:39 common.go:60:
>>>> Spawning new population
INFO: 13:51:39 common.go:66: OK <<<<<
INFO: 13:51:39 common.go:68: >>>> Verifying spawned population
INFO: 13:51:39 common.go:74: OK <<<<<
INFO: 13:51:39 common.go:95: >>>> Generation: 0 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 1 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 2 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 3 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 4 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 5 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 6 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 7 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 8 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 9 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 10 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 11 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 12 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 13 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 14 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 15 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 16 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 17 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 18 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 19 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 20 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 21 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 22 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 23 Run: 95
```

[illegible]



```
INFO: 13:51:39 common.go:95: >>>> Generation: 59 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 60 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 61 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 62 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 63 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 64 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 65 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 66 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 67 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 68 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 69 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 70 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 71 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 72 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 73 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 74 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 75 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 76 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 77 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 78 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 79 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 80 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 81 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 82 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 83 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 84 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 85 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 86 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 87 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 88 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 89 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 90 Run: 95
INFO: 13:51:39 common.go:95: >>>> Generation: 91 Run: 95
INFO: 13:51:39 XOR.go:162: >>>> Output activations: [2.548660e-03 9.535924e-01 9.974783e-01 5.064611e-29]
INFO: 13:51:39 XOR.go:58: Dumped optimal genome to: ./out/xor/95/xor_optimal_5-7
```

```
INFO: 13:51:39 XOR.go:90: Generation #91 winner dumped to: ./out/xor/95/xor_winner_5-7
INFO: 13:51:39 common.go:124: >>>> The winner organism found in [91] generation, fitness: 15.590827
<<<<<
INFO: 13:51:39 common.go:60:
>>>> Spawning new population
INFO: 13:51:39 common.go:66: OK <<<<<
INFO: 13:51:39 common.go:68: >>>> Verifying spawned population
INFO: 13:51:39 common.go:74: OK <<<<<
INFO: 13:51:39 common.go:95: >>>> Generation: 0 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 1 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 2 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 3 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 4 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 5 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 6 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 7 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 8 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 9 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 10 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 11 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 12 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 13 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 14 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 15 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 16 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 17 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 18 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 19 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 20 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 21 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 22 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 23 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 24 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 25 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 26 Run: 96
```

```
INFO: 13:51:39 common.go:95: >>>> Generation: 27 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 28 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 29 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 30 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 31 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 32 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 33 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 34 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 35 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 36 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 37 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 38 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 39 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 40 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 41 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 42 Run: 96
INFO: 13:51:39 common.go:95: >>>> Generation: 43 Run: 96
INFO: 13:51:39 XOR.go:162: >>>> Output activations: [4.851631e-17 9.999992e-01 9.616056e-01 1.545441e-17]
INFO: 13:51:39 XOR.go:90: Generation #43 winner dumped to: ./out/xor/96/xor_winner_7-12
INFO: 13:51:39 common.go:124: >>>> The winner organism found in [43] generation, fitness: 15.694313
<<<<<
INFO: 13:51:39 common.go:60:
>>>> Spawning new population
INFO: 13:51:39 common.go:66: OK <<<<<
INFO: 13:51:39 common.go:68: >>>> Verifying spawned population
INFO: 13:51:39 common.go:74: OK <<<<<
INFO: 13:51:39 common.go:95: >>>> Generation: 0 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 1 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 2 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 3 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 4 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 5 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 6 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 7 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 8 Run: 97
```

```
INFO: 13:51:39 common.go:95: >>>> Generation: 9 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 10 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 11 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 12 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 13 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 14 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 15 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 16 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 17 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 18 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 19 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 20 Run: 97
INFO: 13:51:39 common.go:95: >>>> Generation: 21 Run: 97
INFO: 13:51:39 XOR.go:162: >>>> Output activations: [1.147424e-03 9.750138e-01 9.996111e-01 8.828026e-03]
INFO: 13:51:39 XOR.go:58: Dumped optimal genome to: ./out/xor/97/xor_optimal_5-7
INFO: 13:51:39 XOR.go:90: Generation #21 winner dumped to: ./out/xor/97/xor_winner_5-7
INFO: 13:51:39 common.go:124: >>>> The winner organism found in [21] generation, fitness: 15.718445
<<<<<
INFO: 13:51:39 common.go:60:
>>>> Spawning new population
INFO: 13:51:39 common.go:66: OK <<<<<
INFO: 13:51:39 common.go:68: >>>> Verifying spawned population
INFO: 13:51:39 common.go:74: OK <<<<<
INFO: 13:51:39 common.go:95: >>>> Generation: 0 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 1 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 2 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 3 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 4 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 5 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 6 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 7 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 8 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 9 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 10 Run: 98
INFO: 13:51:39 common.go:95: >>>> Generation: 11 Run: 98
```

[illegible]

[illegible]

```
INFO: 13:51:40 common.go:95: >>>> Generation: 82 Run: 98
INFO: 13:51:40 common.go:95: >>>> Generation: 83 Run: 98
INFO: 13:51:40 common.go:95: >>>> Generation: 84 Run: 98
INFO: 13:51:40 common.go:95: >>>> Generation: 85 Run: 98
INFO: 13:51:40 common.go:95: >>>> Generation: 86 Run: 98
INFO: 13:51:40 common.go:95: >>>> Generation: 87 Run: 98
INFO: 13:51:40 common.go:95: >>>> Generation: 88 Run: 98
INFO: 13:51:40 XOR.go:162: >>>> Output activations: [4.145709e-03 9.999737e-01 1.000000e+00 2.345560e-08]
INFO: 13:51:40 XOR.go:90: Generation #88 winner dumped to: ./out/xor/98/xor_winner_7-18
INFO: 13:51:40 common.go:124: >>>> The winner organism found in [88] generation, fitness: 15.966641
<<<<<
INFO: 13:51:40 common.go:60:
>>>> Spawning new population
INFO: 13:51:40 common.go:66: OK <<<<<
INFO: 13:51:40 common.go:68: >>>> Verifying spawned population
INFO: 13:51:40 common.go:74: OK <<<<<
INFO: 13:51:40 common.go:95: >>>> Generation: 0 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 1 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 2 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 3 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 4 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 5 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 6 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 7 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 8 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 9 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 10 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 11 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 12 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 13 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 14 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 15 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 16 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 17 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 18 Run: 99
```

```
INFO: 13:51:40 common.go:95: >>>> Generation: 19 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 20 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 21 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 22 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 23 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 24 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 25 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 26 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 27 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 28 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 29 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 30 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 31 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 32 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 33 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 34 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 35 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 36 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 37 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 38 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 39 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 40 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 41 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 42 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 43 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 44 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 45 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 46 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 47 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 48 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 49 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 50 Run: 99
INFO: 13:51:40 common.go:95: >>>> Generation: 51 Run: 99
INFO: 13:51:40 XOR.go:162: >>>> Output activations: [8.351250e-28 1.000000e+00 9.995621e-01 2.340460e-03]
INFO: 13:51:40 XOR.go:90: Generation #51 winner dumped to: ./out/xor/99/xor_winner_8-16
```



INFO: 13:51:40 common.go:124: >>>> The winner organism found in [51] generation, fitness: 15.977780  
<<<<<

Solved 93 trials from 100, success rate: 0.930000

Average

Trial duration:	251.067745ms
Epoch duration:	1.790507ms
Generations/trial:	55.2

Champion found in 18 trial run

Winner Nodes:	7
Winner Genes:	16
Winner Evals:	10150

Diversity:	47
Complexity:	23
Age:	14
Fitness:	16.000000

Average among winners

Winner Nodes:	7.0
Winner Genes:	13.9
Winner Evals:	10282.8
Generations/trial:	51.9

Diversity:	40.096774
Complexity:	20.978495
Age:	25.397849
Fitness:	15.842292

Averages for all organisms evaluated during experiment

Diversity:	23.227037
Complexity:	14.279039
Age:	14.253140
Fitness:	7.974019

Efficiency score: 1.929031

>>> Start genome file: ./data/xorstartgenes

>>> Configuration file: ./data/xor.neat