

### *Using relations with position and arity*

namespace combination: [cactus, angel]  
got 4 analogies with 4 mappings each  
analogy is [(angel/angel,cactus/cactus), (angel/clouds,cactus/pot), (angel/body,cactus/trunk), (angel/arm,cactus/arm)]  
analogy is [(angel/angel,cactus/cactus), (angel/clouds,cactus/pot), (angel/wing,cactus/arm), (angel/body,cactus/trunk)]  
analogy is [(angel/angel,cactus/cactus), (angel/leg,cactus/arm), (angel/stars,cactus/pot), (angel/body,cactus/trunk)]  
analogy is [(angel/angel,cactus/cactus), (angel/leg,cactus/arm), (angel/clouds,cactus/pot), (angel/body,cactus/trunk)]  
processed 231 root mappings from a total of 22 concepts

namespace combination: [cactus, pig]  
got 3 analogies with 5 mappings each  
analogy is [(cactus/pot,pig/pigpen), (cactus/flower,pig/fur), (cactus/trunk,pig/body), (cactus/arm,pig/leg), (cactus/cactus,pig/pig)]  
analogy is [(cactus/pot,pig/pigpen), (cactus/ribs,pig/fur), (cactus/trunk,pig/body), (cactus/arm,pig/leg), (cactus/cactus,pig/pig)]  
analogy is [(pig/pigpen,cactus/pot), (pig/body,cactus/trunk), (pig/leg,cactus/arm), (pig/fur,cactus/spines), (pig/pig,cactus/cactus)]  
processed 171 root mappings from a total of 19 concepts

namespace combination: [angel, pig]  
got 5 analogies with 9 mappings each  
analogy is [(pig/trotter,angel/foot), (pig/eye,angel/eye), (pig/pig,angel/angel), (pig/leg,angel/leg), (pig/body,angel/body), (pig/head,angel/head), (pig/pigpen,angel/stars), (pig/nose,angel/nose), (pig/mouth,angel/mouth)]  
analogy is [(pig/ear,angel/eye), (pig/trotter,angel/foot), (pig/pig,angel/angel), (pig/body,angel/body), (pig/leg,angel/leg), (pig/head,angel/head), (pig/pigpen,angel/stars), (pig/nose,angel/nose), (pig/mouth,angel/mouth)]  
analogy is [(pig/ear,angel/eye), (pig/pig,angel/angel), (pig/body,angel/body), (pig/head,angel/head), (pig/pigpen,angel/stars), (pig/leg,angel/arm), (pig/nose,angel/nose), (pig/trotter,angel/hand), (pig/mouth,angel/mouth)]  
analogy is [(angel/angel,pig/pig), (angel/eye,pig/eye), (angel/body,pig/body), (angel/head,pig/head), (angel/clouds,pig/pigpen), (angel/arm,pig/leg), (angel/hand,pig/trotter), (angel/nose,pig/nose), (angel/mouth,pig/mouth)]  
analogy is [(pig/ear,angel/eye), (pig/pig,angel/angel), (pig/body,angel/body), (pig/head,angel/head), (pig/pigpen,angel/clouds), (pig/leg,angel/arm), (pig/trotter,angel/hand), (pig/nose,angel/nose), (pig/mouth,angel/mouth)]  
processed 351 root mappings from a total of 27 concepts

### *Using relations without position but with arity*

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namespace combination: [cactus, angel]
got 4 analogies with 4 mappings each
analogy is [(angel/angel,cactus/cactus), (angel/clouds,cactus/pot), (angel/body,cactus/trunk), (angel/arm,cactus/arm)]
analogy is [(angel/angel,cactus/cactus), (angel/clouds,cactus/pot), (angel/wing,cactus/arm), (angel/body,cactus/trunk)]
analogy is [(angel/angel,cactus/cactus), (angel/leg,cactus/arm), (angel/stars,cactus/pot), (angel/body,cactus/trunk)]
analogy is [(angel/angel,cactus/cactus), (angel/leg,cactus/arm), (angel/clouds,cactus/pot), (angel/body,cactus/trunk)]
processed 231 root mappings from a total of 22 concepts
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namespace combination: [cactus, pig]
got 3 analogies with 5 mappings each
analogy is [(cactus/pot,pig/pigpen), (cactus/flower,pig/fur), (cactus/trunk,pig/body), (cactus/arm,pig/leg), (cactus/cactus,pig/pig)]
analogy is [(cactus/pot,pig/pigpen), (cactus/ribs,pig/fur), (cactus/trunk,pig/body), (cactus/arm,pig/leg), (cactus/cactus,pig/pig)]
analogy is [(pig/pigpen,cactus/pot), (pig/body,cactus/trunk), (pig/leg,cactus/arm), (pig/fur,cactus/spines), (pig/pig,cactus/cactus)]
processed 171 root mappings from a total of 19 concepts
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namespace combination: [angel, pig]
got 9 analogies with 9 mappings each
analogy is [(pig/nose,angel/halo), (pig/eye,angel/eye), (pig/pig,angel/angel), (pig/body,angel/body), (pig/head,angel/head),
(pig/pigpen,angel/stars), (pig/leg,angel/arm), (pig/trotter,angel/hand), (pig/mouth,angel/mouth)]
analogy is [(angel/halo,pig/nose), (angel/angel,pig/pig), (angel/eye,pig/eye), (angel/body,pig/body), (angel/head,pig/head),
(angel/clouds,pig/pigpen), (angel/arm,pig/leg), (angel/hand,pig/trotter), (angel/mouth,pig/mouth)]
analogy is [(angel/mouth,pig/nose), (angel/angel,pig/pig), (angel/eye,pig/eye), (angel/body,pig/body), (angel/head,pig/head),
(angel/clouds,pig/pigpen), (angel/arm,pig/leg), (angel/nose,pig/mouth), (angel/hand,pig/trotter)]
analogy is [(pig/pig,angel/angel), (pig/eye,angel/eye), (pig/body,angel/body), (pig/head,angel/head), (pig/pigpen,angel/clouds),
(pig/leg,angel/arm), (pig/trotter,angel/hand), (pig/nose,angel/nose), (pig/mouth,angel/mouth)]
analogy is [(angel/halo,pig/mouth), (angel/mouth,pig/nose), (angel/eye,pig/eye), (angel/angel,pig/pig), (angel/body,pig/body),
(angel/head,pig/head), (angel/arm,pig/leg), (angel/clouds,pig/pigpen), (angel/hand,pig/trotter)]
analogy is [(pig/ear,angel/eye), (pig/pig,angel/angel), (pig/body,angel/body), (pig/head,angel/head), (pig/pigpen,angel/clouds),
(pig/leg,angel/arm), (pig/trotter,angel/hand), (pig/nose,angel/nose), (pig/mouth,angel/mouth)]
analogy is [(pig/mouth,angel/halo), (pig/eye,angel/eye), (pig/pig,angel/angel), (pig/body,angel/body), (pig/head,angel/head),
(pig/leg,angel/arm), (pig/pigpen,angel/stars), (pig/nose,angel/nose), (pig/trotter,angel/hand)]
analogy is [(angel/halo,pig/mouth), (angel/angel,pig/pig), (angel/eye,pig/eye), (angel/body,pig/body), (angel/head,pig/head),
(angel/clouds,pig/pigpen), (angel/arm,pig/leg), (angel/hand,pig/trotter), (angel/nose,pig/nose)]
analogy is [(pig/nose,angel/halo), (pig/trotter,angel/foot), (pig/eye,angel/eye), (pig/pig,angel/angel), (pig/body,angel/body),
(pig/leg,angel/leg), (pig/head,angel/head), (pig/pigpen,angel/stars), (pig/mouth,angel/mouth)]
processed 351 root mappings from a total of 27 concepts
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### *Using relations without position neither arity*

namespace combination: [cactus, angel]

got 15 analogies with 4 mappings each

analogy is [(angel/mouth,angel/leg), (angel/head,angel/body), (angel/nose,angel/arm), (angel/halo,angel/wing)]  
analogy is [(angel/wing,angel/nose), (angel/body,angel/head), (angel/leg,angel/eye), (angel/arm,angel/mouth)]  
analogy is [(angel/nose,angel/leg), (angel/head,angel/body), (angel/halo,angel/wing), (angel/mouth,angel/arm)]  
analogy is [(angel/mouth,angel/leg), (angel/head,angel/body), (angel/halo,angel/wing), (angel/eye,angel/arm)]  
analogy is [(angel/angel,cactus/cactus), (angel/leg,cactus/arm), (angel/stars,cactus/pot), (angel/body,cactus/trunk)]  
analogy is [(angel/angel,cactus/cactus), (angel/leg,cactus/arm), (angel/clouds,cactus/pot), (angel/body,cactus/trunk)]  
analogy is [(angel/nose,angel/leg), (angel/head,angel/body), (angel/eye,angel/wing), (angel/mouth,angel/arm)]  
analogy is [(angel/angel,cactus/cactus), (angel/clouds,cactus/pot), (angel/body,cactus/trunk), (angel/head,cactus/arm)]  
analogy is [(angel/angel,cactus/cactus), (angel/clouds,cactus/pot), (angel/wing,cactus/arm), (angel/body,cactus/trunk)]  
analogy is [(angel/angel,cactus/cactus), (angel/clouds,cactus/pot), (angel/arm,cactus/arm), (angel/body,cactus/trunk)]  
analogy is [(angel/body,angel/head), (angel/leg,angel/halo), (angel/wing,angel/eye), (angel/arm,angel/mouth)]  
analogy is [(angel/eye,angel/leg), (angel/head,angel/body), (angel/halo,angel/wing), (angel/mouth,angel/arm)]  
analogy is [(angel/head,angel/body), (angel/nose,angel/arm), (angel/halo,angel/leg), (angel/eye,angel/wing)]  
analogy is [(angel/nose,angel/wing), (angel/mouth,angel/leg), (angel/head,angel/body), (angel/halo,angel/arm)]  
analogy is [(angel/wing,angel/mouth), (angel/leg,angel/nose), (angel/body,angel/head), (angel/arm,angel/halo)]  
processed 231 root mappings from a total of 22 concepts

namespace combination: [cactus, pig]

got 5 analogies with 5 mappings each

analogy is [(cactus/pot,pig/pigpen), (cactus/flower,pig/fur), (cactus/trunk,pig/body), (cactus/arm,pig/leg), (cactus/cactus,pig/pig)]  
analogy is [(pig/pigpen,cactus/pot), (pig/head,cactus/arm), (pig/body,cactus/trunk), (pig/fur,cactus/spines), (pig/pig,cactus/cactus)]  
analogy is [(cactus/pot,pig/pigpen), (cactus/ribs,pig/fur), (cactus/trunk,pig/body), (cactus/arm,pig/leg), (cactus/cactus,pig/pig)]  
analogy is [(pig/pigpen,cactus/pot), (pig/body,cactus/trunk), (pig/leg,cactus/arm), (pig/fur,cactus/spines), (pig/pig,cactus/cactus)]  
analogy is [(pig/pigpen,cactus/pot), (pig/body,cactus/trunk), (pig/tail,cactus/arm), (pig/fur,cactus/spines), (pig/pig,cactus/cactus)]  
processed 171 root mappings from a total of 19 concepts

namespace combination: [angel, pig]

got 17 analogies with 11 mappings each

analogy is [(pig/ear,angel/eye), (pig/pig,angel/angel), (pig/eye,angel/halo), (pig/body,angel/body), (pig/head,angel/head),  
(pig/pigpen,angel/clouds), (pig/leg,angel/arm), (pig/tail,angel/wing), (pig/trotter,angel/hand), (pig/nose,angel/nose),  
(pig/mouth,angel/mouth)]  
analogy is [(angel/angel,pig/pig), (angel/body,pig/body), (angel/mouth,pig/eye), (angel/eye,pig/mouth), (angel/head,pig/head),  
(angel/clouds,pig/pigpen), (angel/arm,pig/leg), (angel/wing,pig/tail), (angel/halo,pig/ear), (angel/hand,pig/trotter), (angel/nose,pig/nose)]  
analogy is [(pig/eye,angel/nose), (pig/pig,angel/angel), (pig/body,angel/body), (pig/head,angel/head), (pig/pigpen,angel/clouds),  
(pig/leg,angel/arm), (pig/tail,angel/wing), (pig/ear,angel/halo), (pig/nose,angel/eye), (pig/trotter,angel/hand), (pig/mouth,angel/mouth)]

analogy is [(angel/angel,pig/pig), (angel/eye,pig/eye), (angel/body,pig/body), (angel/head,pig/head), (angel/clouds,pig/pigpen),  
(angel/arm,pig/leg), (angel/wing,pig/tail), (angel/halo,pig/ear), (angel/hand,pig/trotter), (angel/nose,pig/nose), (angel/mouth,pig/mouth)]  
analogy is [(pig/ear,angel/eye), (pig/trotter,angel/foot), (pig/nose,angel/mouth), (pig/eye,angel/halo), (pig/pig,angel/angel),  
(pig/leg,angel/leg), (pig/body,angel/body), (pig/head,angel/head), (pig/pigpen,angel/stars), (pig/tail,angel/wing), (pig/mouth,angel/nose)]  
analogy is [(pig/pig,angel/angel), (pig/eye,angel/halo), (pig/body,angel/body), (pig/head,angel/head), (pig/pigpen,angel/clouds),  
(pig/leg,angel/arm), (pig/ear,angel/mouth), (pig/tail,angel/wing), (pig/mouth,angel/nose), (pig/nose,angel/eye), (pig/trotter,angel/hand)]  
analogy is [(pig/ear,angel/eye), (pig/nose,angel/halo), (pig/trotter,angel/foot), (pig/pig,angel/angel), (pig/eye,angel/mouth),  
(pig/body,angel/body), (pig/leg,angel/leg), (pig/head,angel/head), (pig/pigpen,angel/stars), (pig/tail,angel/wing), (pig/mouth,angel/nose)]  
analogy is [(pig/ear,angel/eye), (pig/mouth,angel/halo), (pig/tail,angel/leg), (pig/pig,angel/angel), (pig/eye,angel/mouth),  
(pig/body,angel/body), (pig/head,angel/head), (pig/pigpen,angel/clouds), (pig/leg,angel/arm), (pig/nose,angel/nose),  
(pig/trotter,angel/hand)]  
analogy is [(pig/ear,angel/nose), (pig/pig,angel/angel), (pig/eye,angel/halo), (pig/body,angel/body), (pig/head,angel/head),  
(pig/pigpen,angel/clouds), (pig/leg,angel/arm), (pig/tail,angel/wing), (pig/nose,angel/eye), (pig/trotter,angel/hand),  
(pig/mouth,angel/mouth)]  
analogy is [(angel/halo,pig/nose), (angel/angel,pig/pig), (angel/eye,pig/eye), (angel/body,pig/body), (angel/head,pig/head),  
(angel/clouds,pig/pigpen), (angel/arm,pig/leg), (angel/mouth,pig/ear), (angel/wing,pig/tail), (angel/nose,pig/mouth),  
(angel/hand,pig/trotter)]  
analogy is [(pig/ear,angel/eye), (pig/mouth,angel/halo), (pig/pig,angel/angel), (pig/eye,angel/mouth), (pig/body,angel/body),  
(pig/head,angel/head), (pig/pigpen,angel/clouds), (pig/leg,angel/arm), (pig/tail,angel/wing), (pig/nose,angel/nose),  
(pig/trotter,angel/hand)]  
analogy is [(pig/pig,angel/angel), (pig/eye,angel/halo), (pig/body,angel/body), (pig/mouth,angel/eye), (pig/head,angel/head),  
(pig/pigpen,angel/clouds), (pig/leg,angel/arm), (pig/ear,angel/mouth), (pig/tail,angel/wing), (pig/trotter,angel/hand),  
(pig/nose,angel/nose)]  
analogy is [(angel/halo,pig/mouth), (angel/angel,pig/pig), (angel/eye,pig/eye), (angel/body,pig/body), (angel/head,pig/head),  
(angel/clouds,pig/pigpen), (angel/arm,pig/leg), (angel/mouth,pig/ear), (angel/wing,pig/tail), (angel/hand,pig/trotter),  
(angel/nose,pig/nose)]  
analogy is [(pig/nose,angel/mouth), (pig/pig,angel/angel), (pig/eye,angel/eye), (pig/body,angel/body), (pig/head,angel/head),  
(pig/pigpen,angel/clouds), (pig/leg,angel/arm), (pig/tail,angel/wing), (pig/ear,angel/halo), (pig/mouth,angel/nose),  
(pig/trotter,angel/hand)]  
analogy is [(pig/ear,angel/eye), (pig/nose,angel/halo), (pig/pig,angel/angel), (pig/eye,angel/mouth), (pig/body,angel/body),  
(pig/head,angel/head), (pig/pigpen,angel/stars), (pig/leg,angel/arm), (pig/tail,angel/wing), (pig/mouth,angel/nose),  
(pig/trotter,angel/hand)]  
analogy is [(pig/eye,angel/nose), (pig/trotter,angel/foot), (pig/mouth,angel/halo), (pig/pig,angel/angel), (pig/leg,angel/leg),  
(pig/body,angel/body), (pig/head,angel/head), (pig/tail,angel/arm), (pig/pigpen,angel/stars), (pig/ear,angel/mouth), (pig/nose,angel/eye)]  
analogy is [(angel/angel,pig/pig), (angel/body,pig/body), (angel/mouth,pig/eye), (angel/head,pig/head), (angel/clouds,pig/pigpen),  
(angel/arm,pig/leg), (angel/wing,pig/tail), (angel/halo,pig/ear), (angel/nose,pig/mouth), (angel/eye,pig/nose), (angel/hand,pig/trotter)]  
processed 351 root mappings from a total of 27 concepts