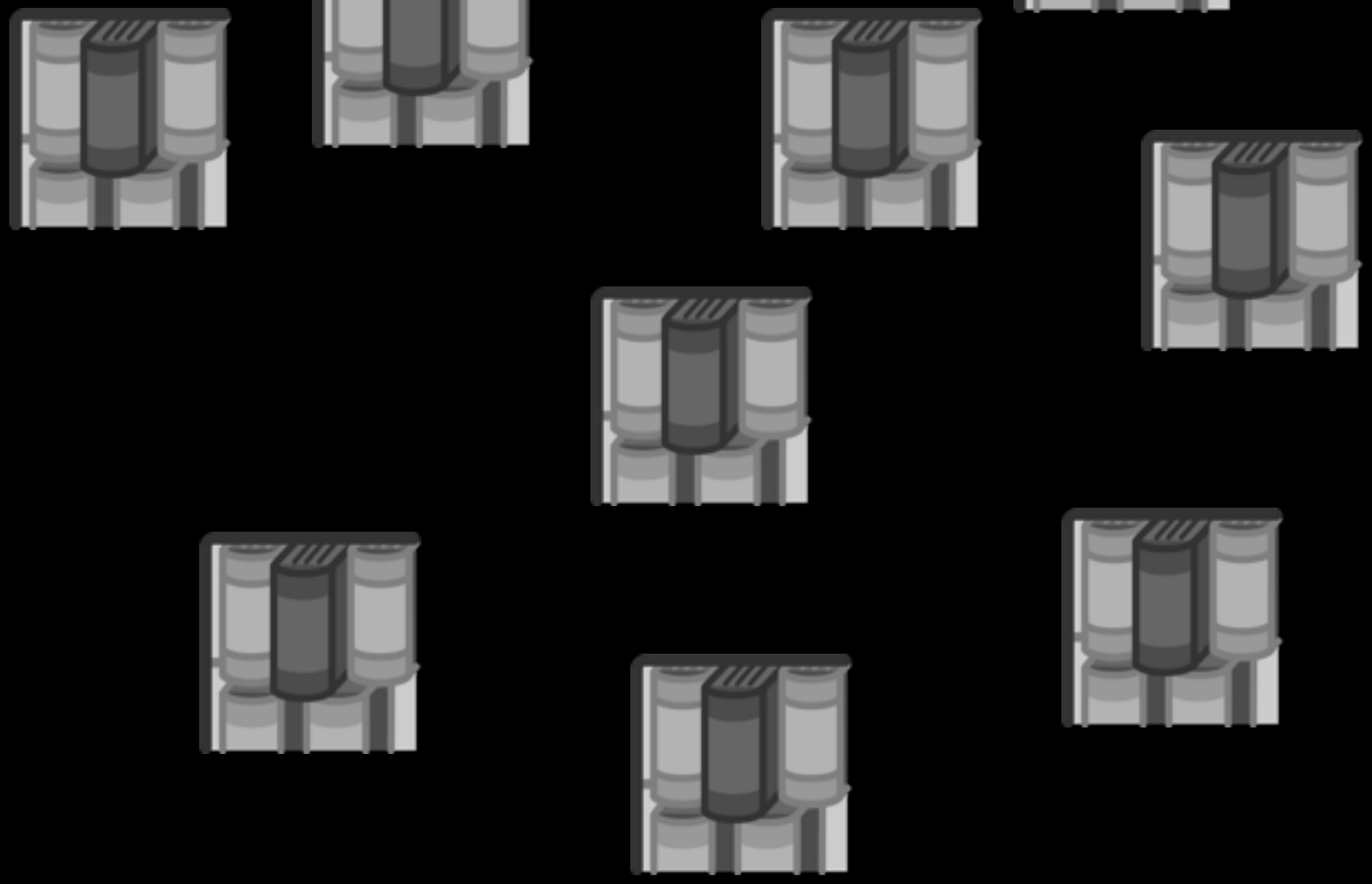
# Clustering technique for conceptual cluster

Brice Govin


# Clustering technique for conceptual cluster

- Clustering ?
- Concept?
- An iteration to rule them all
- And in an approach bind them
- And come the hobbits and their issues



# Clustering?

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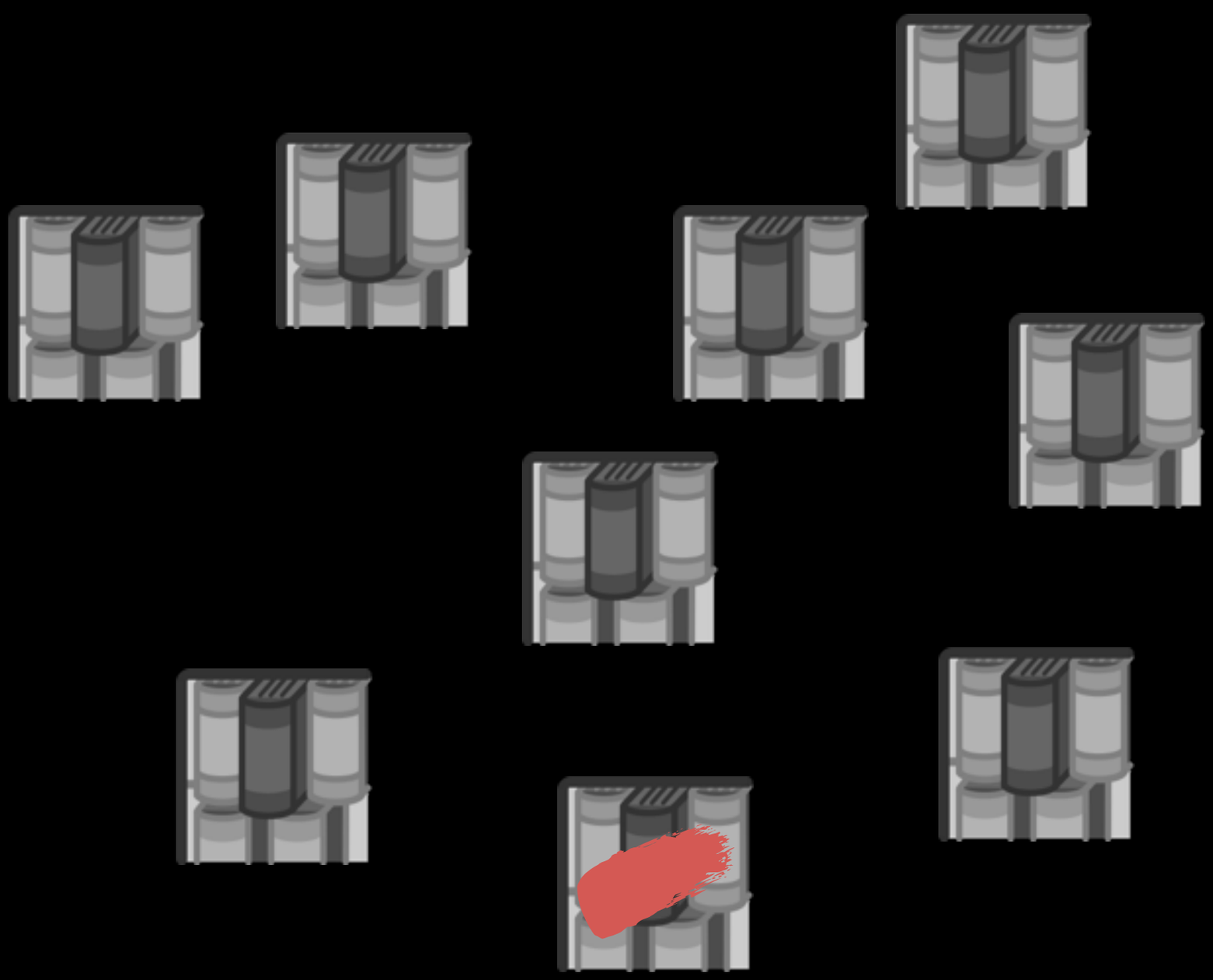

# Clustering?

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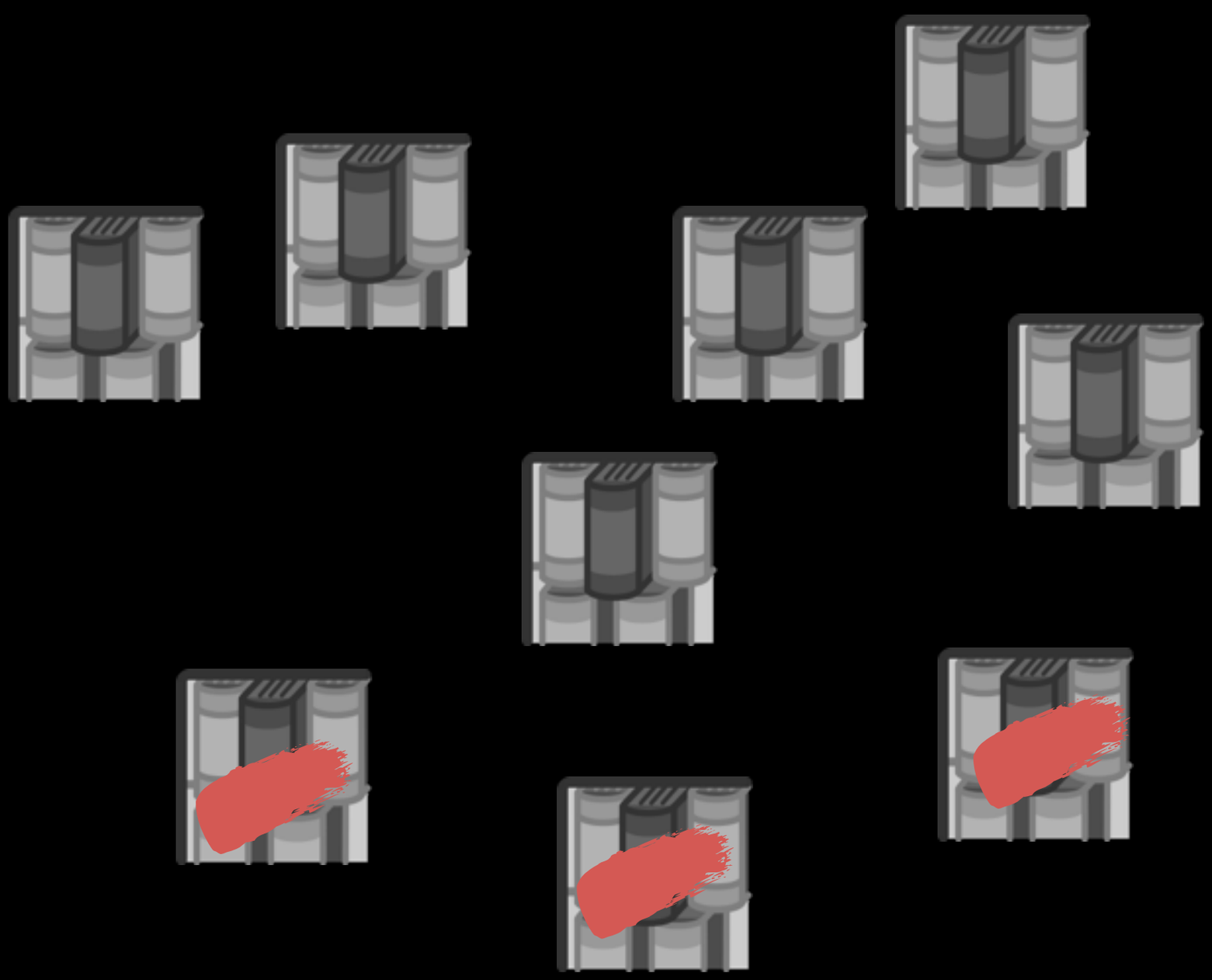

# Clustering?

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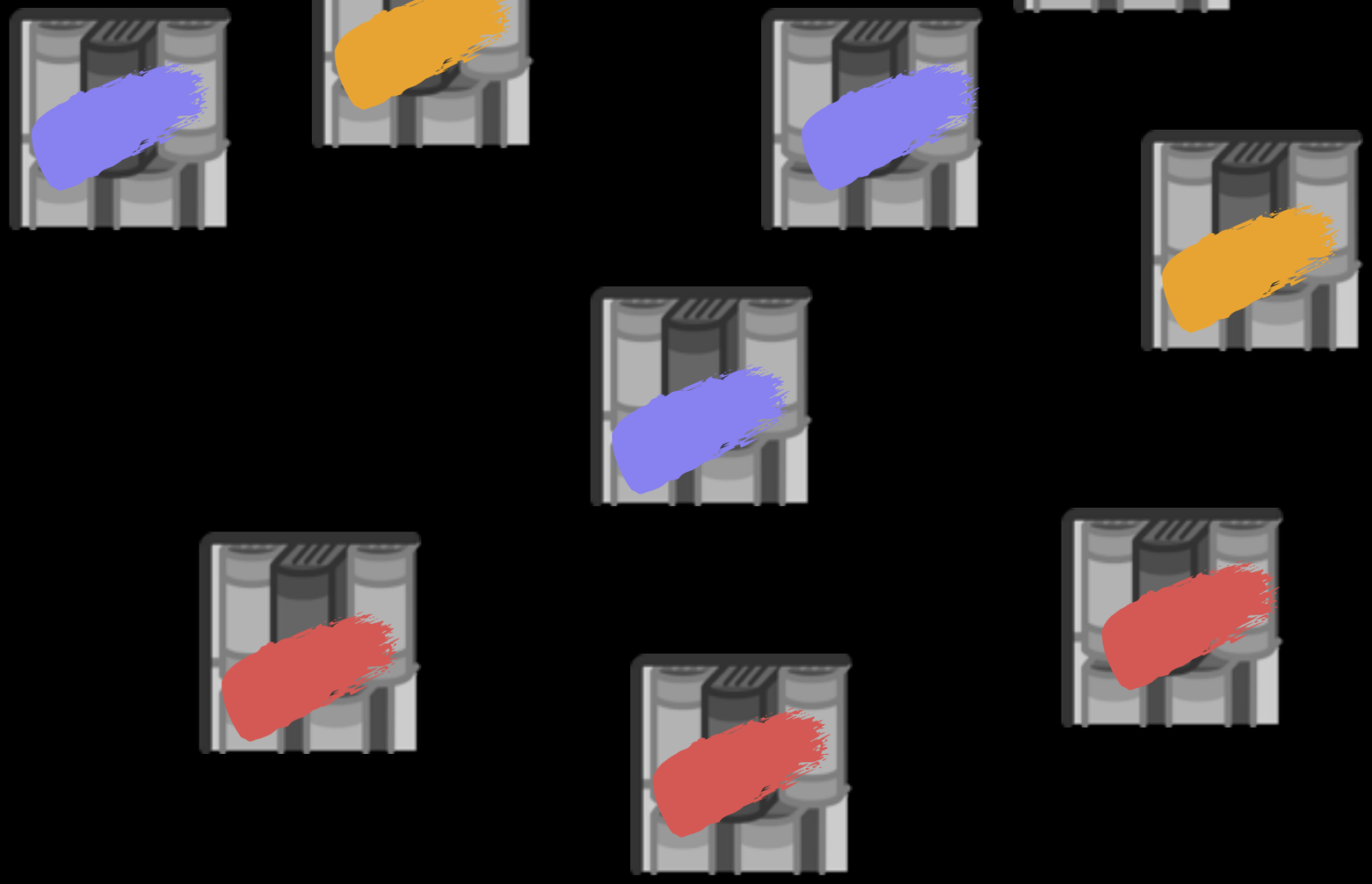

# Clustering?

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# Concept

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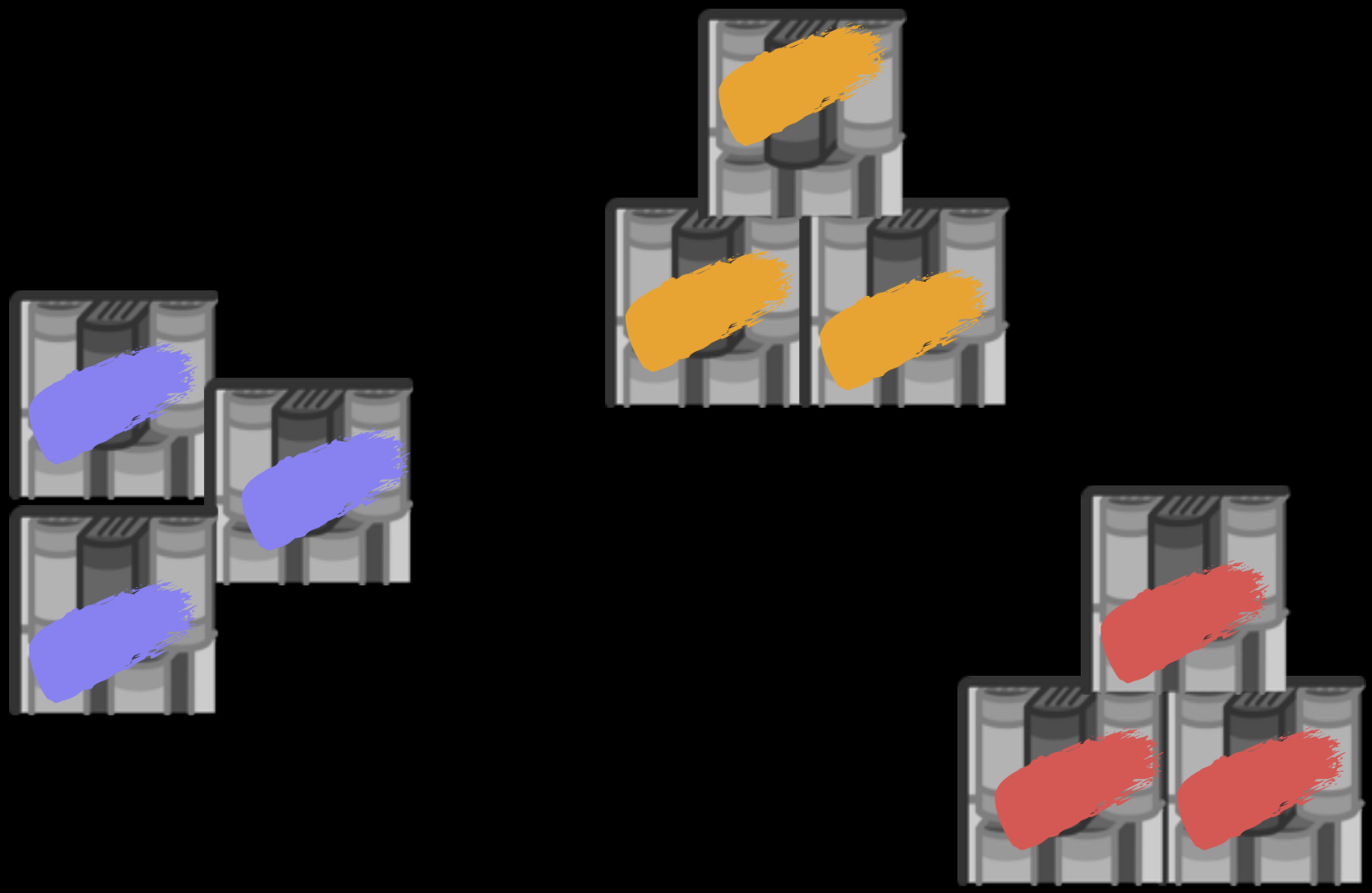

# Concept?

Conceptual cluster

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# Clustering concepts

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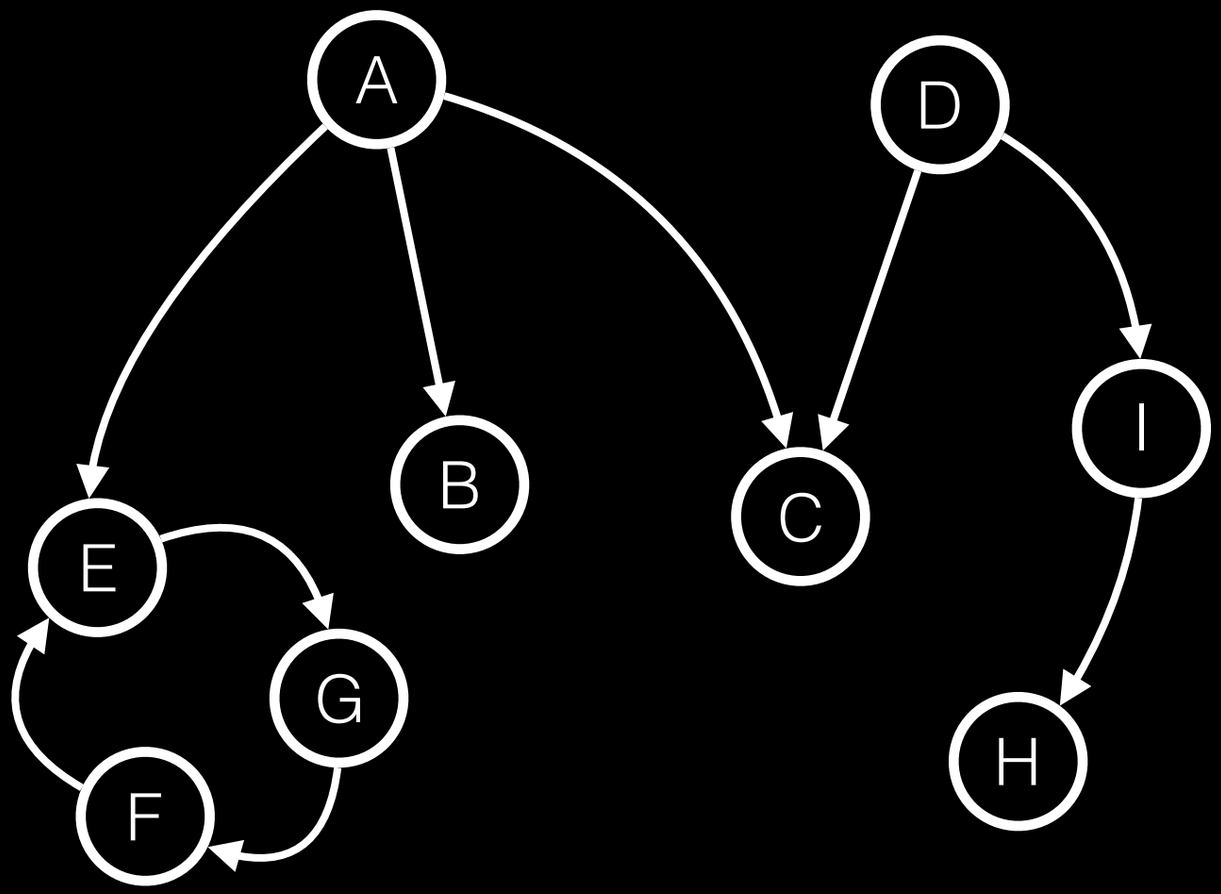



# An iteration to rule them all

Extracted graph

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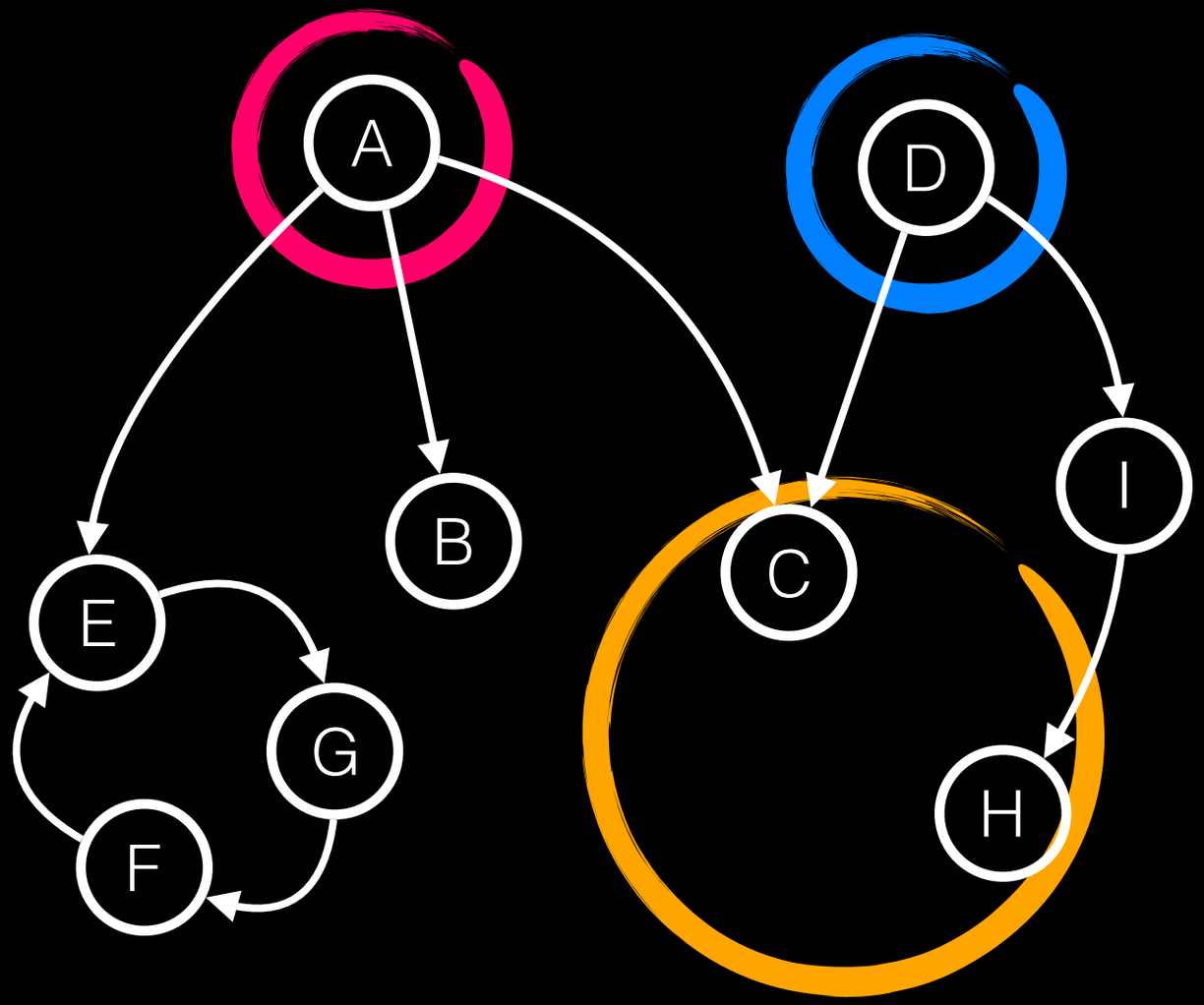


# An iteration to rule them all

Kernel Selection

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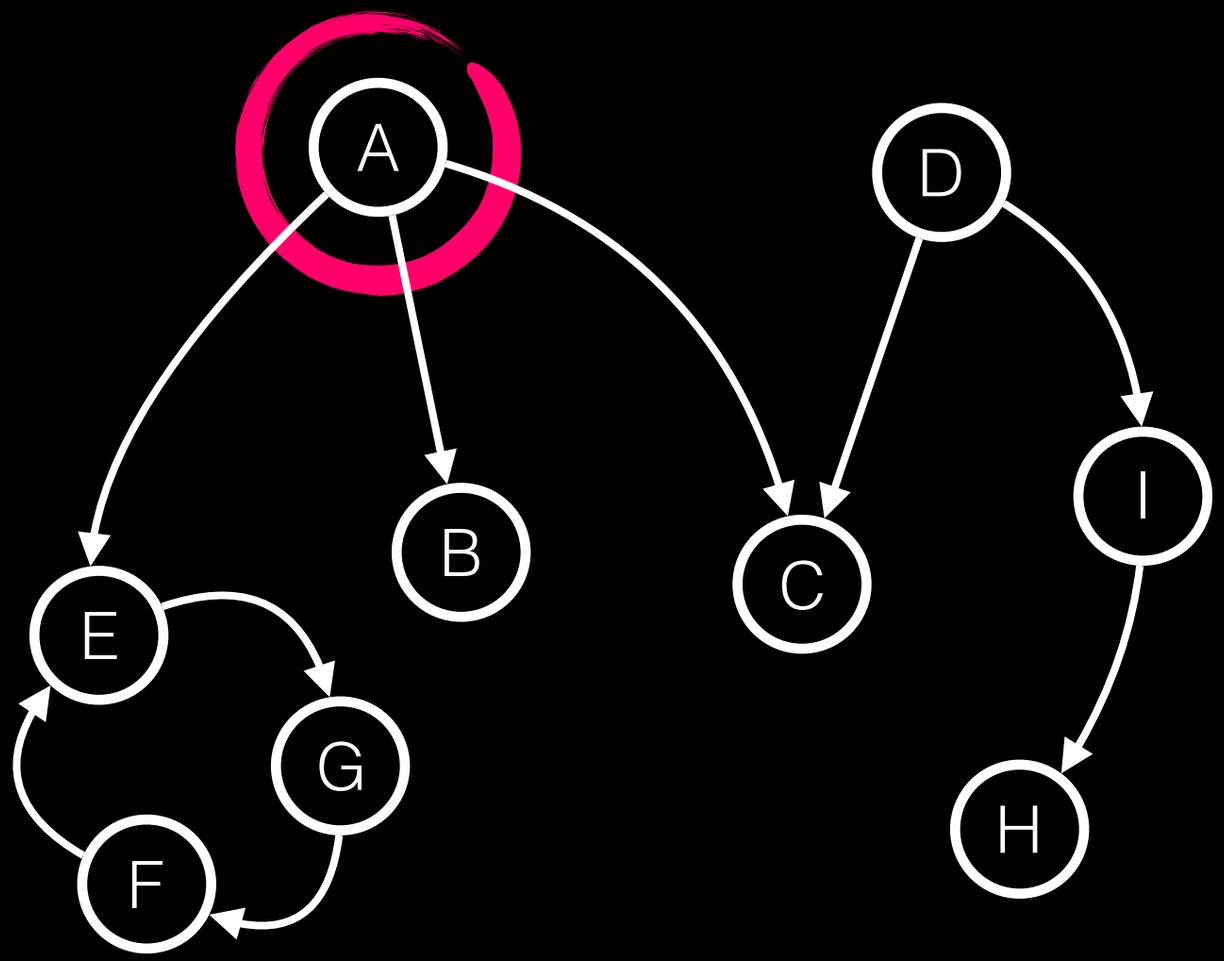


# An iteration to rule them all

Navigating the graph

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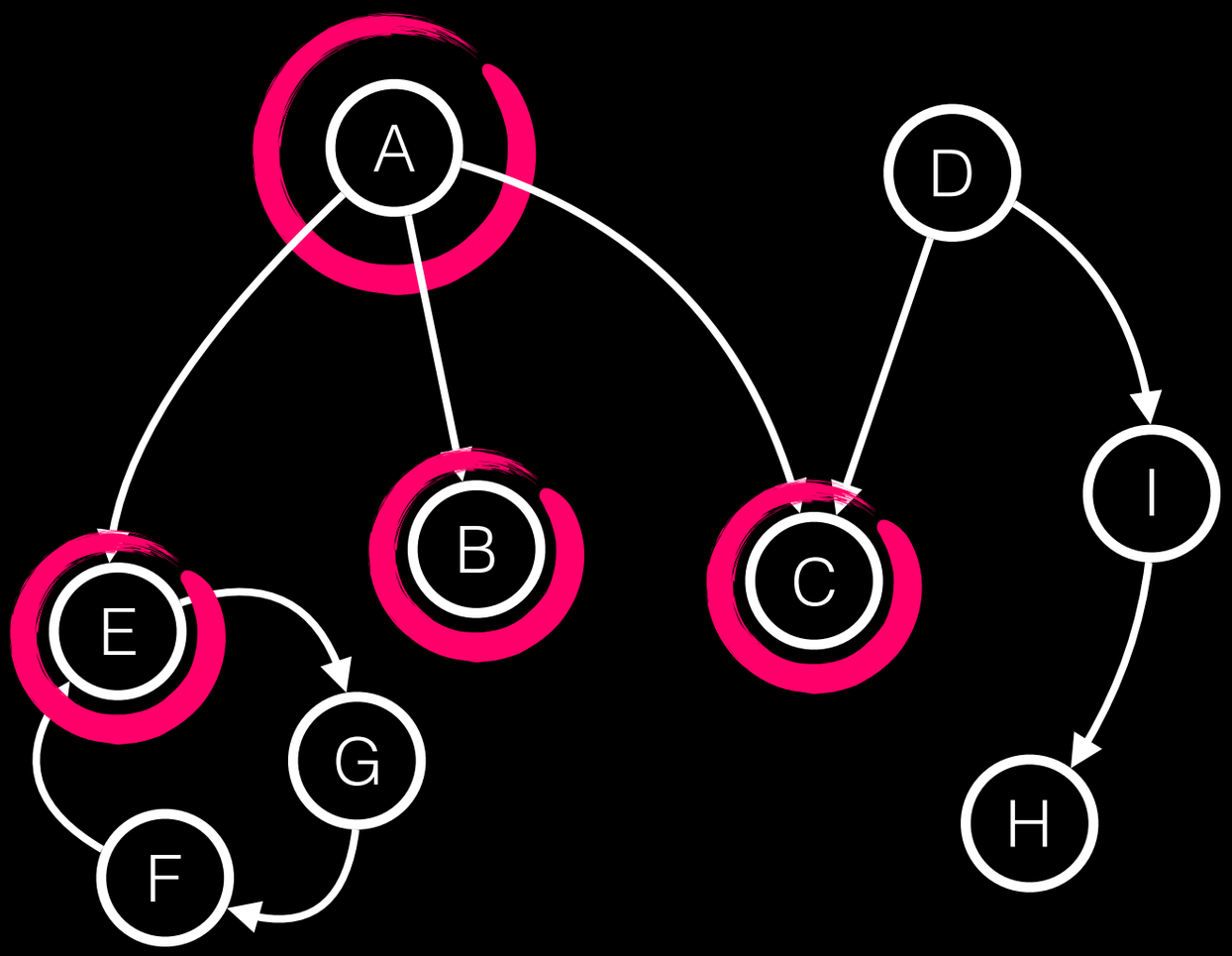


# An iteration to rule them all

Navigating the graph

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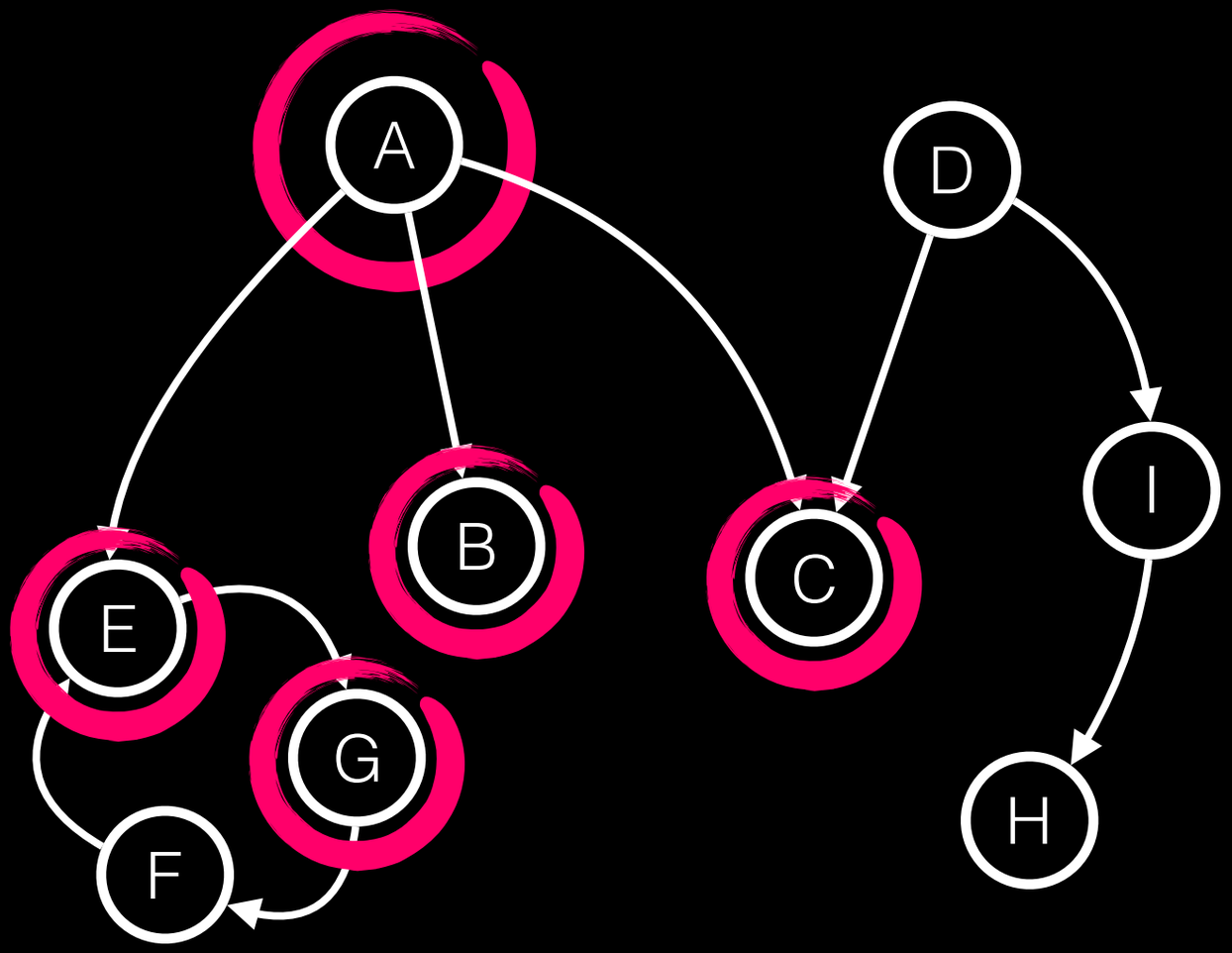


# An iteration to rule them all

Navigating the graph

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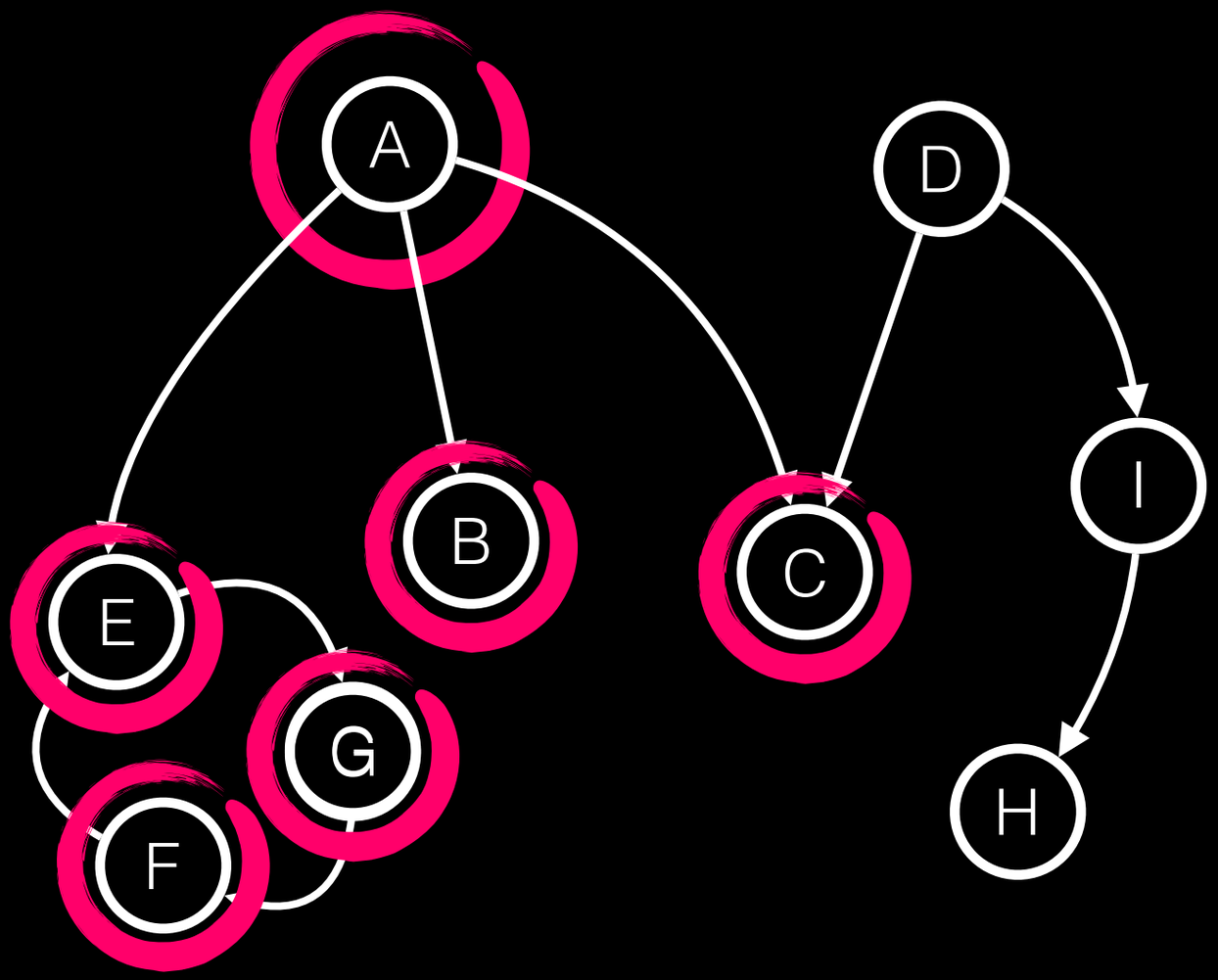


# An iteration to rule them all

Navigating the graph

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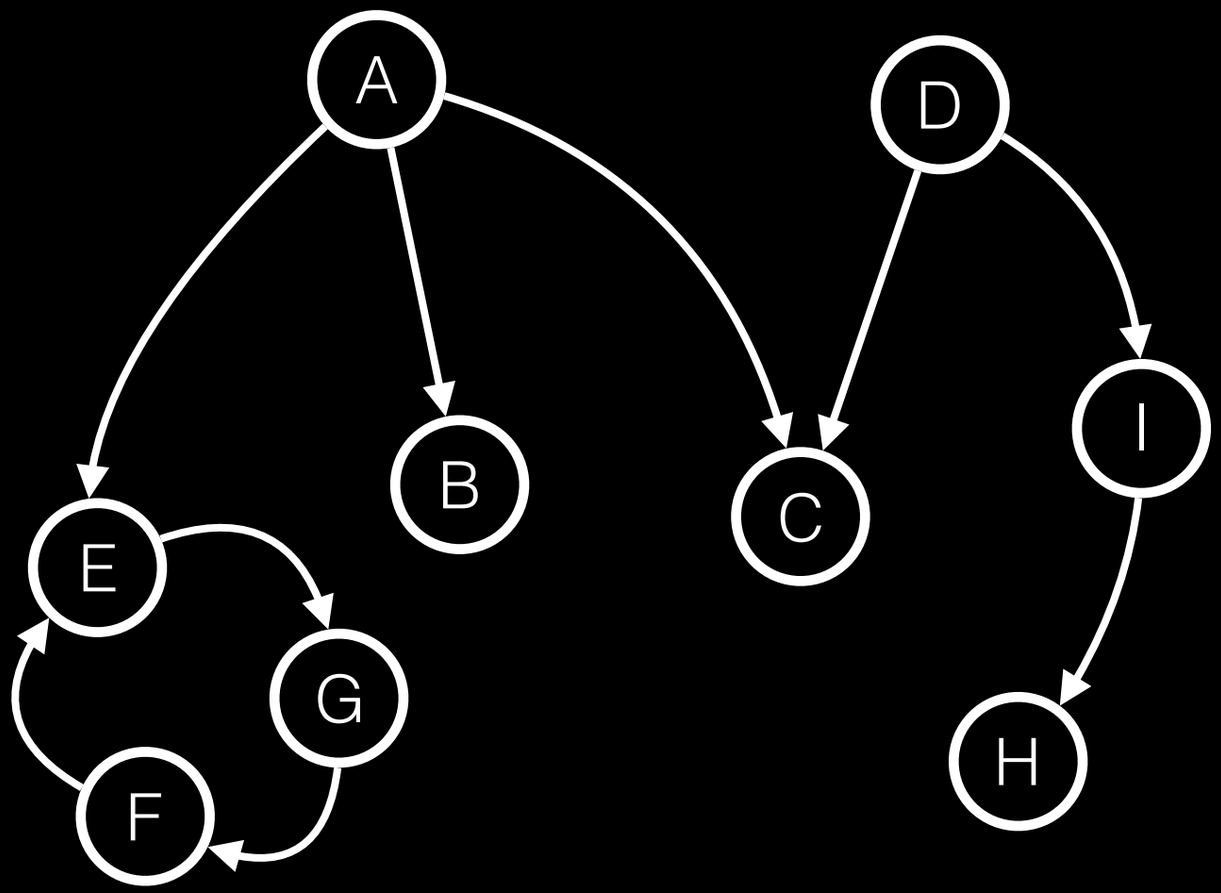


dist(A,F)

similarity(A,H)

# An iteration to rule them all

Difference between traditional methods and ours

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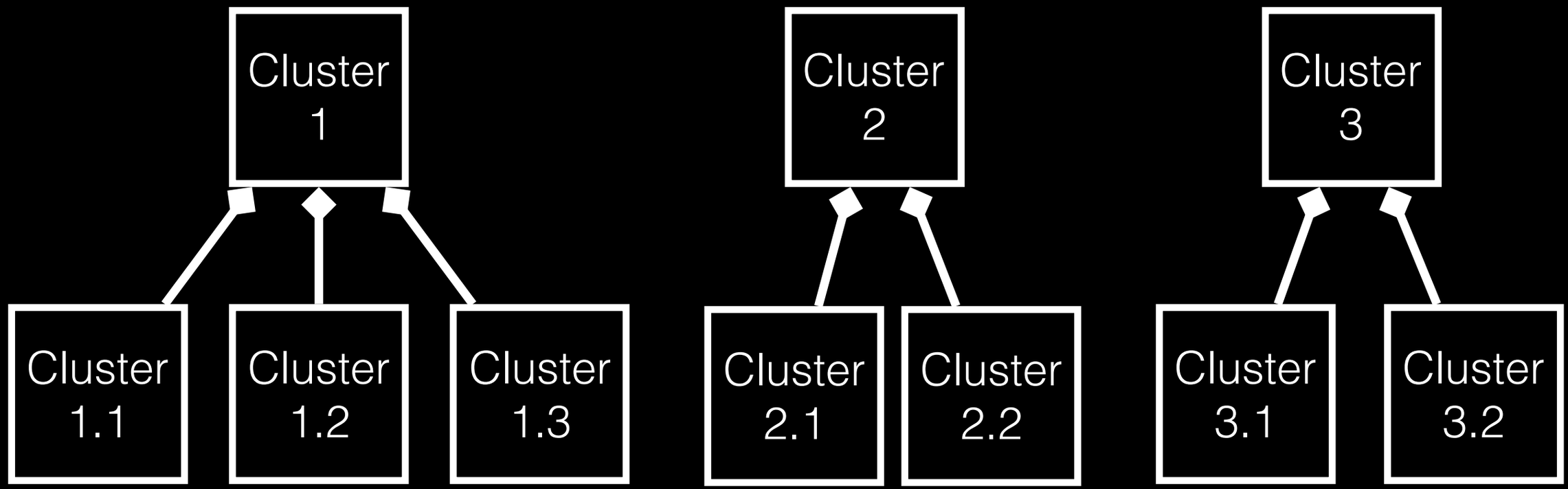
# And in an approach bind them


# And in an approach bind them

Why iterative?
Because hierarchy of clusters

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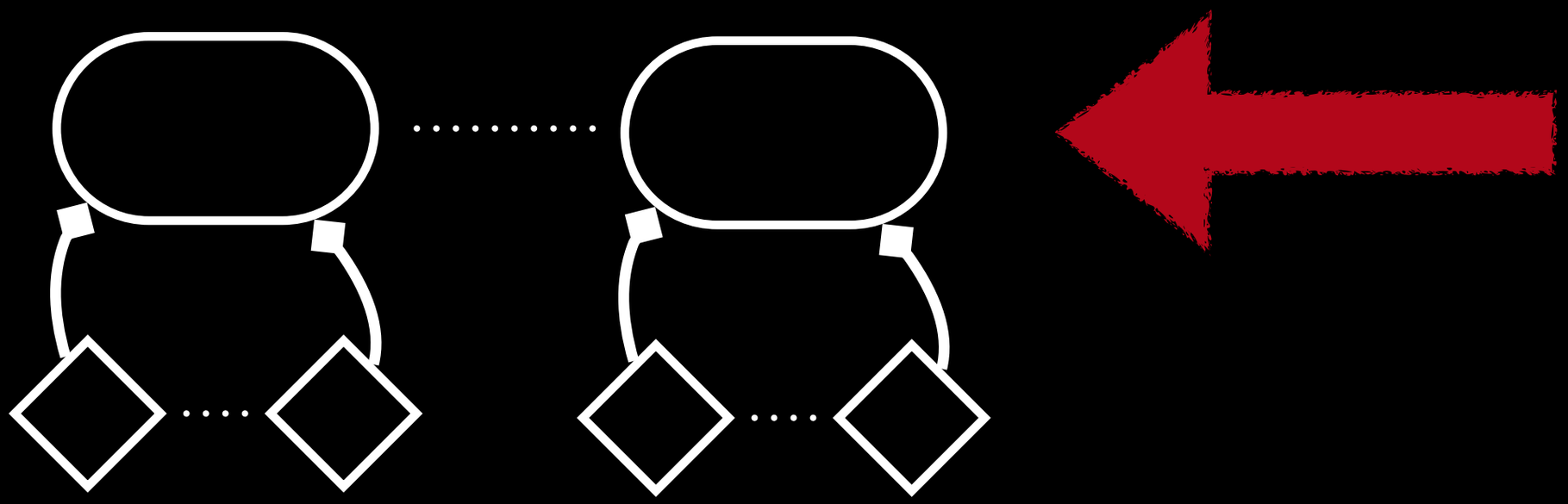
Packages

Subprograms



# And in an approach bind them

How it works?

First instance, packages clustering

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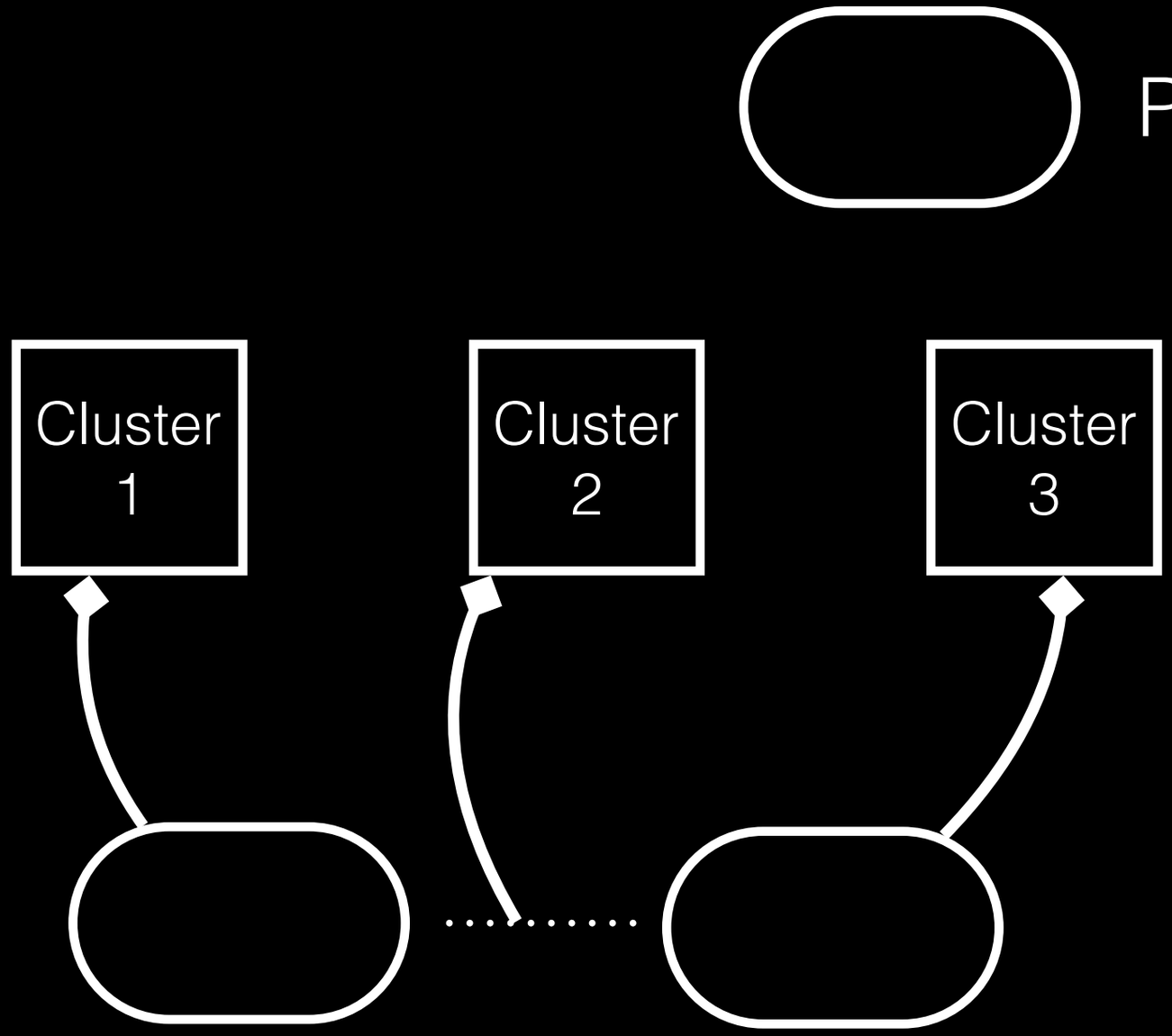


# And in an approach bind them

How it works?

First instance, packages clustering

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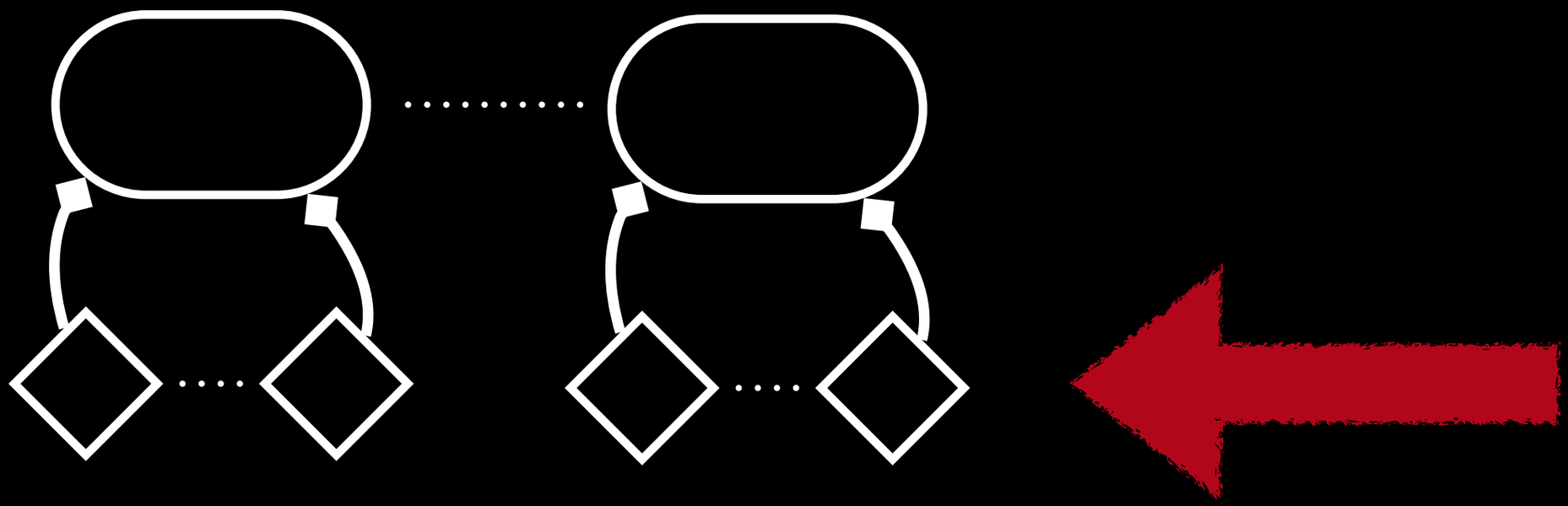
Packages

Subprograms



# And in an approach bind them

How it works?

2nd instance, subprograms clustering

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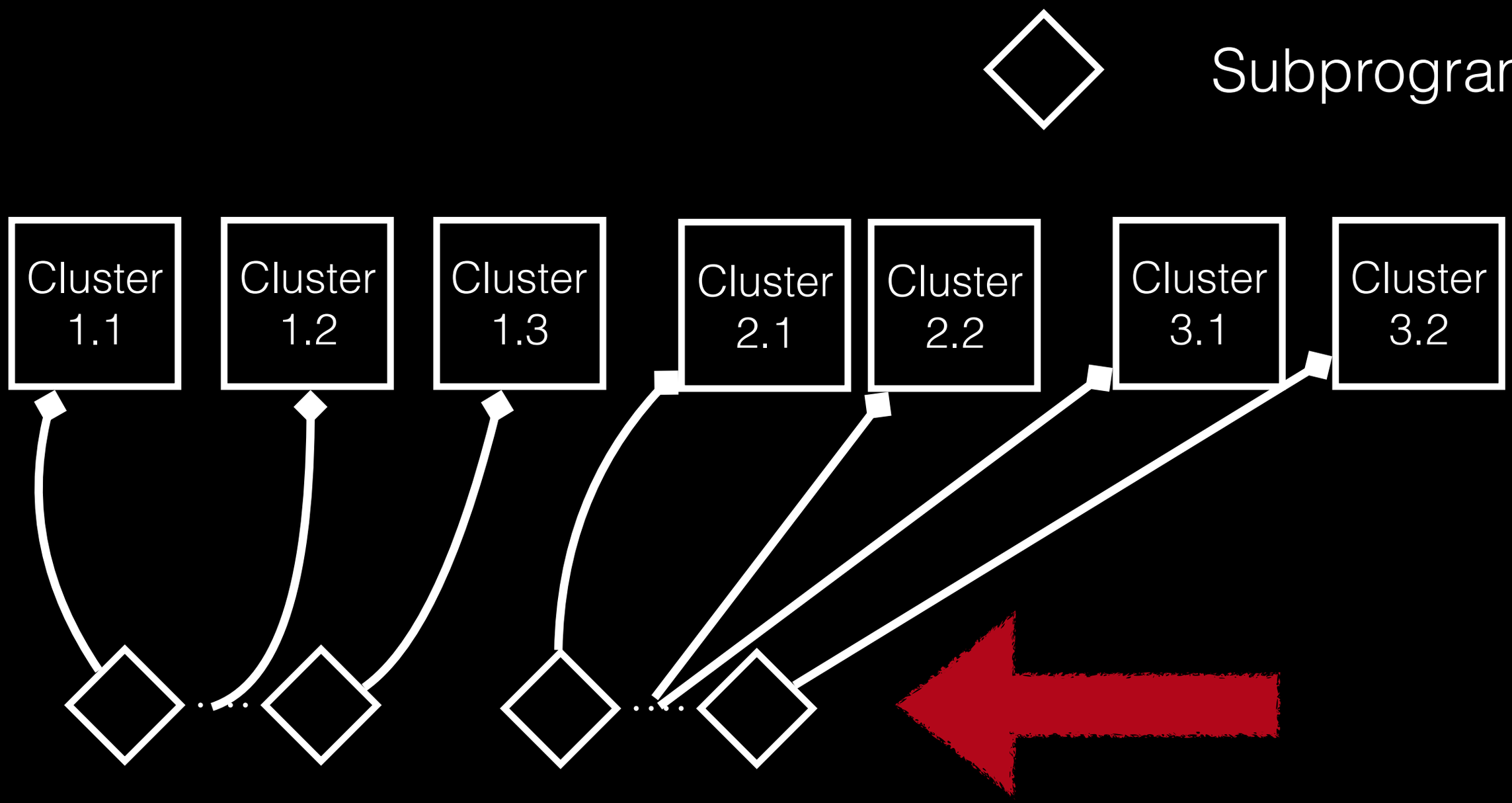


# And in an approach bind them

How it works?

2nd instance, subprograms clustering

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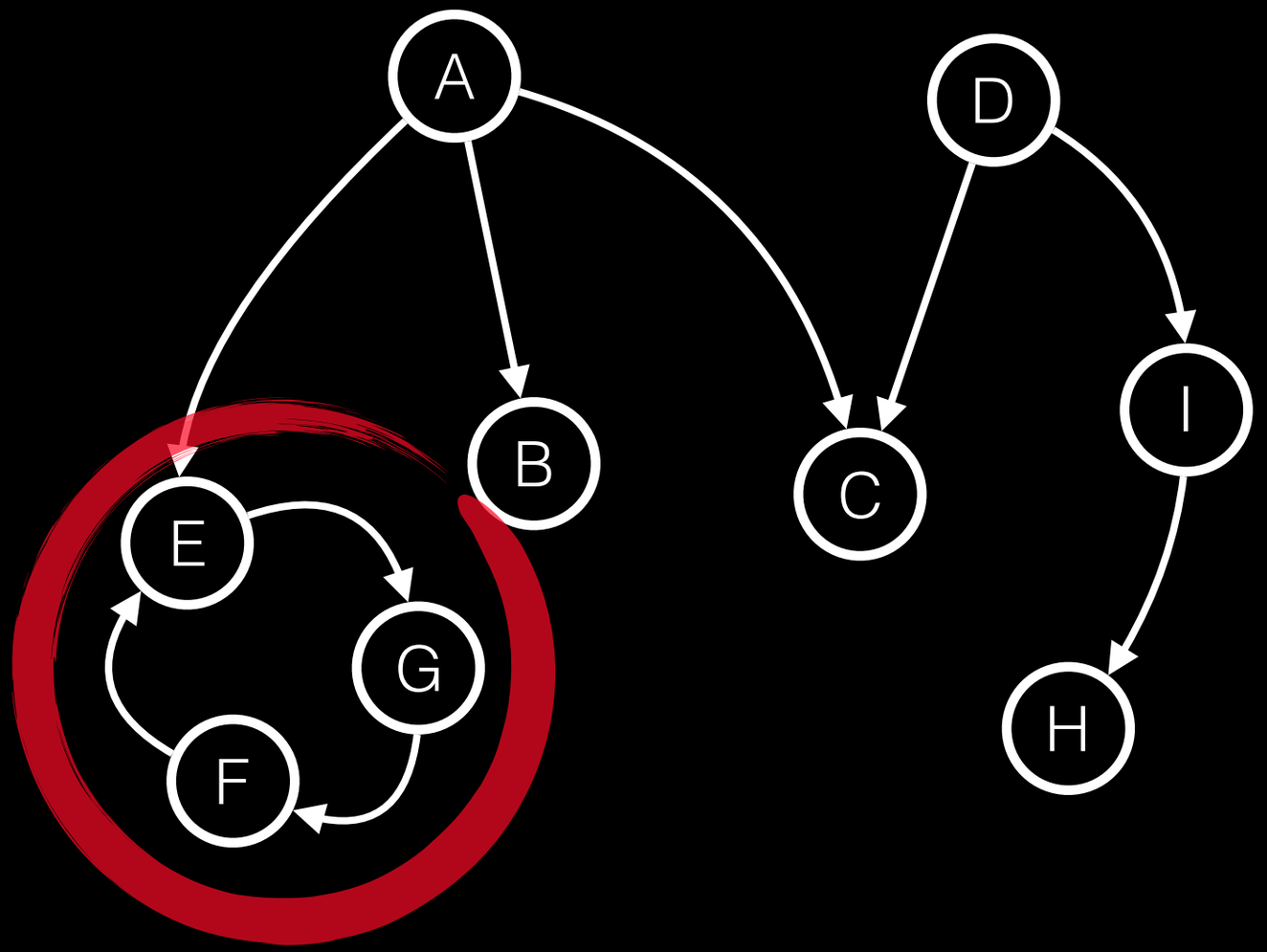


# And come the hobbits and their issues

Cyclic dependencies

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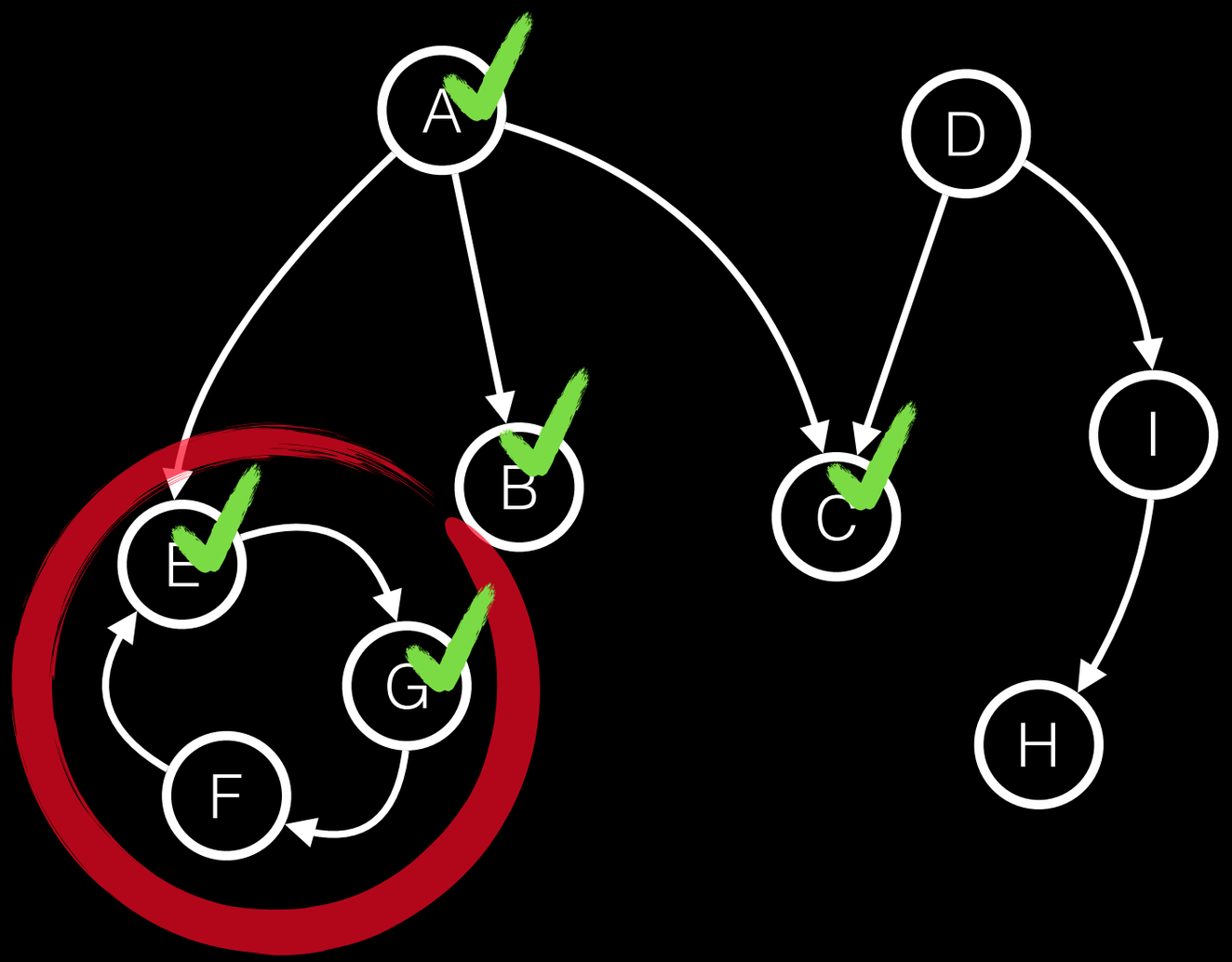


# And come the hobbits and their issues

Cyclic dependencies
Keep track of navigated nodes

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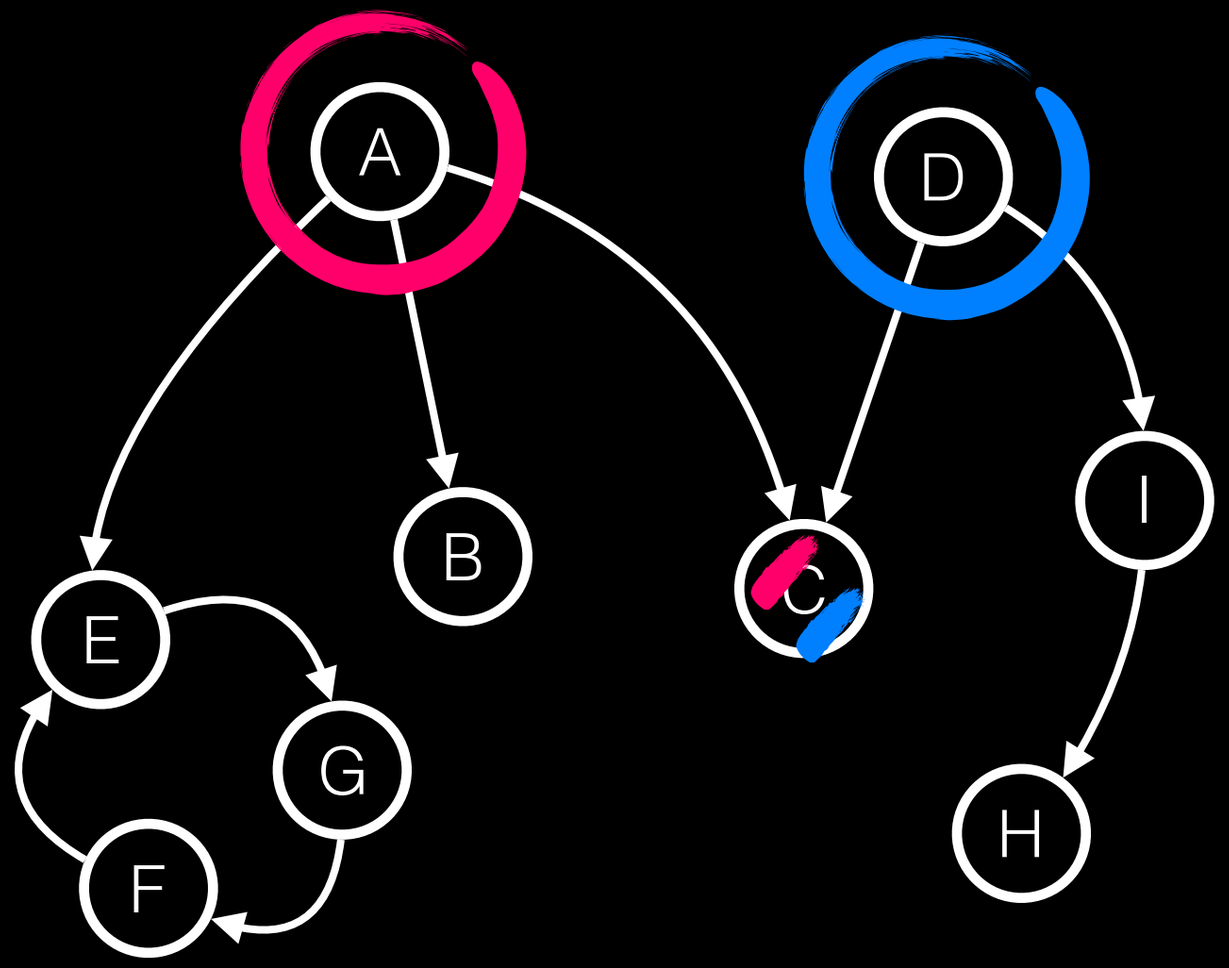


# And come the hobbits and their issues

Multiple allocation

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1st Instance: packages clustering

Precision: 98%

Recall: 88%

2nd Instance: subprograms clustering

Precision: ~60%

Recall: ~50%%

# Talk about numbers

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# What next?

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