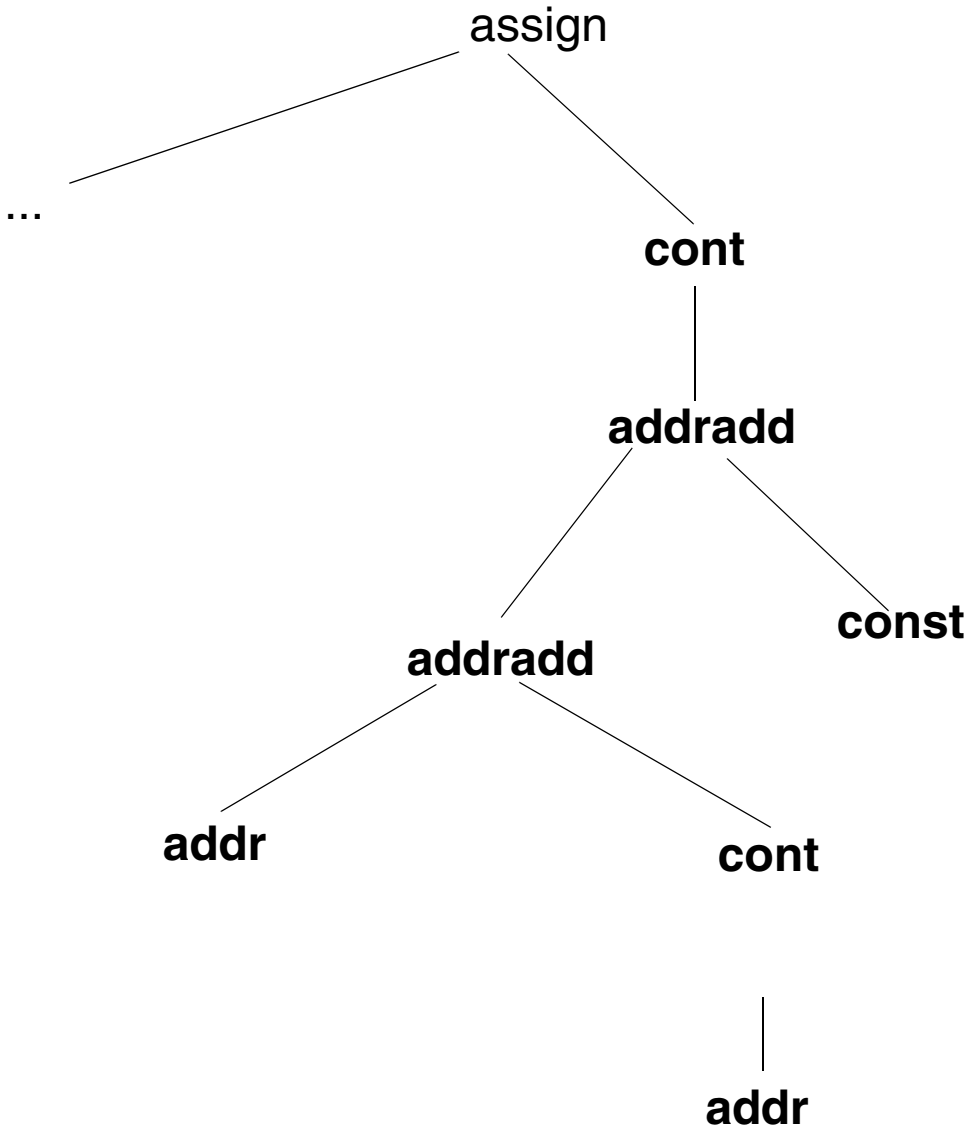
Pattern Selection

Pass 1 bottom-up:

Annotate the nodes with
sets of pairs
{ (value descriptor, costs)}



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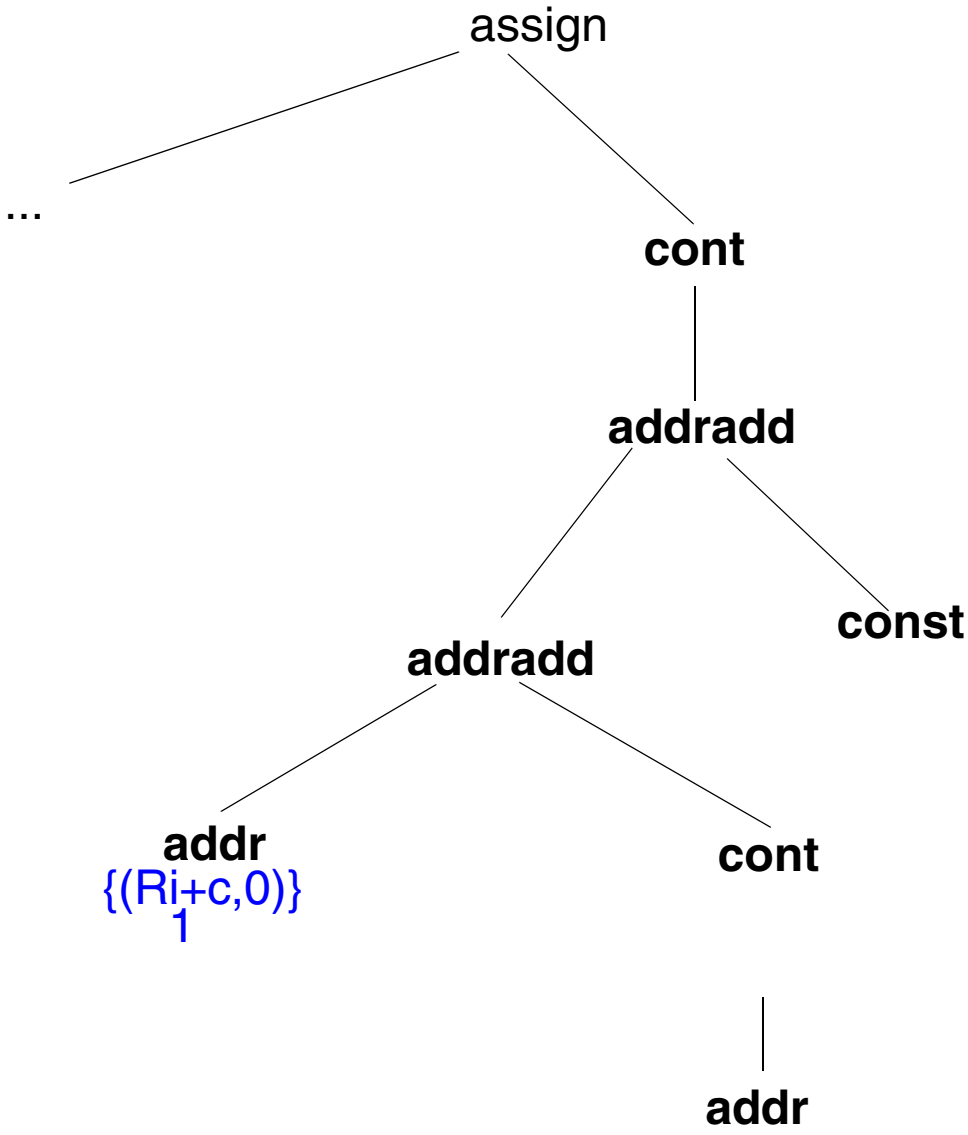
Pattern Selection

Pass 1 bottom-up:

Annotate the nodes with
sets of pairs
{ (value descriptor, costs)}



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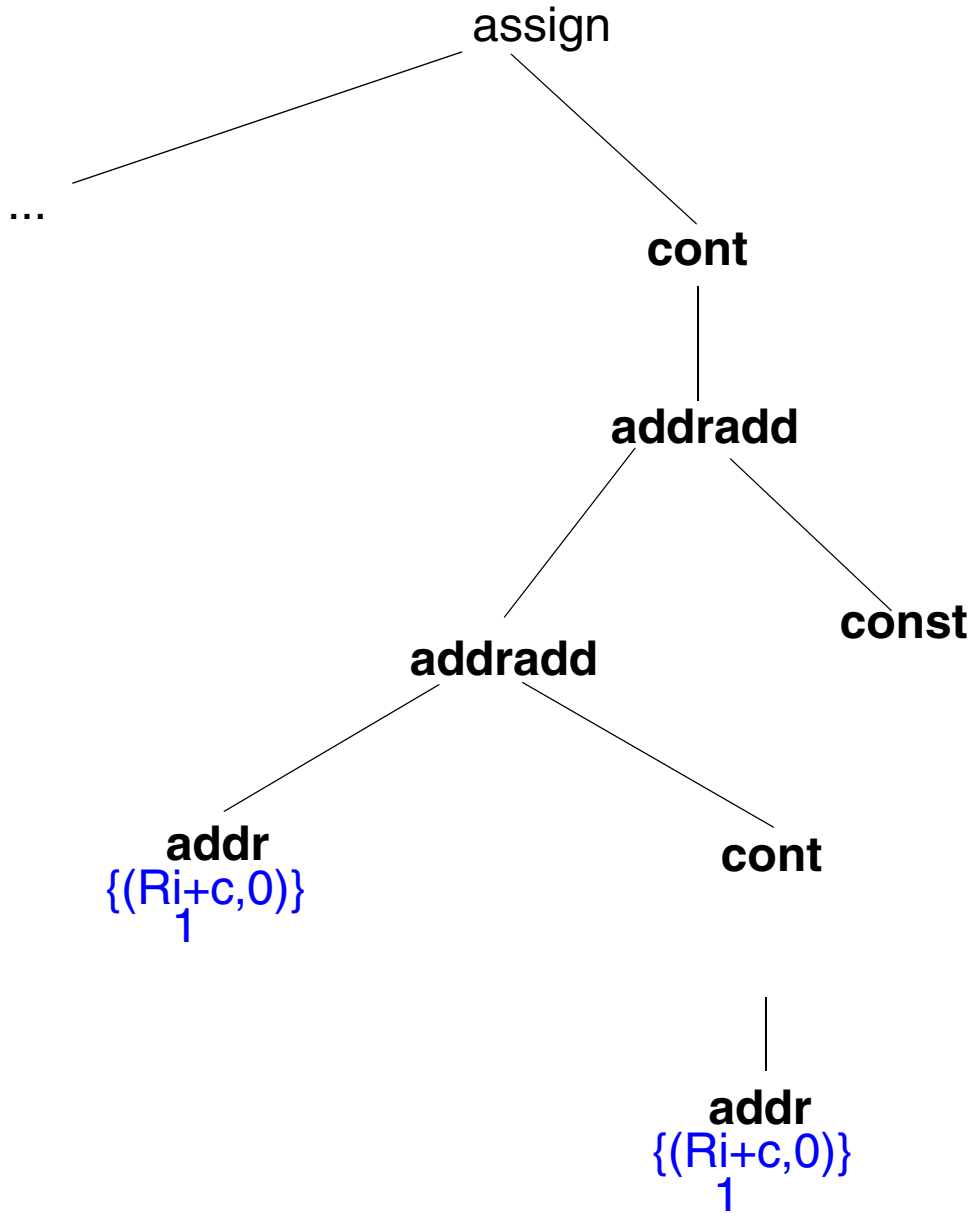
{ (value descriptor, costs)}



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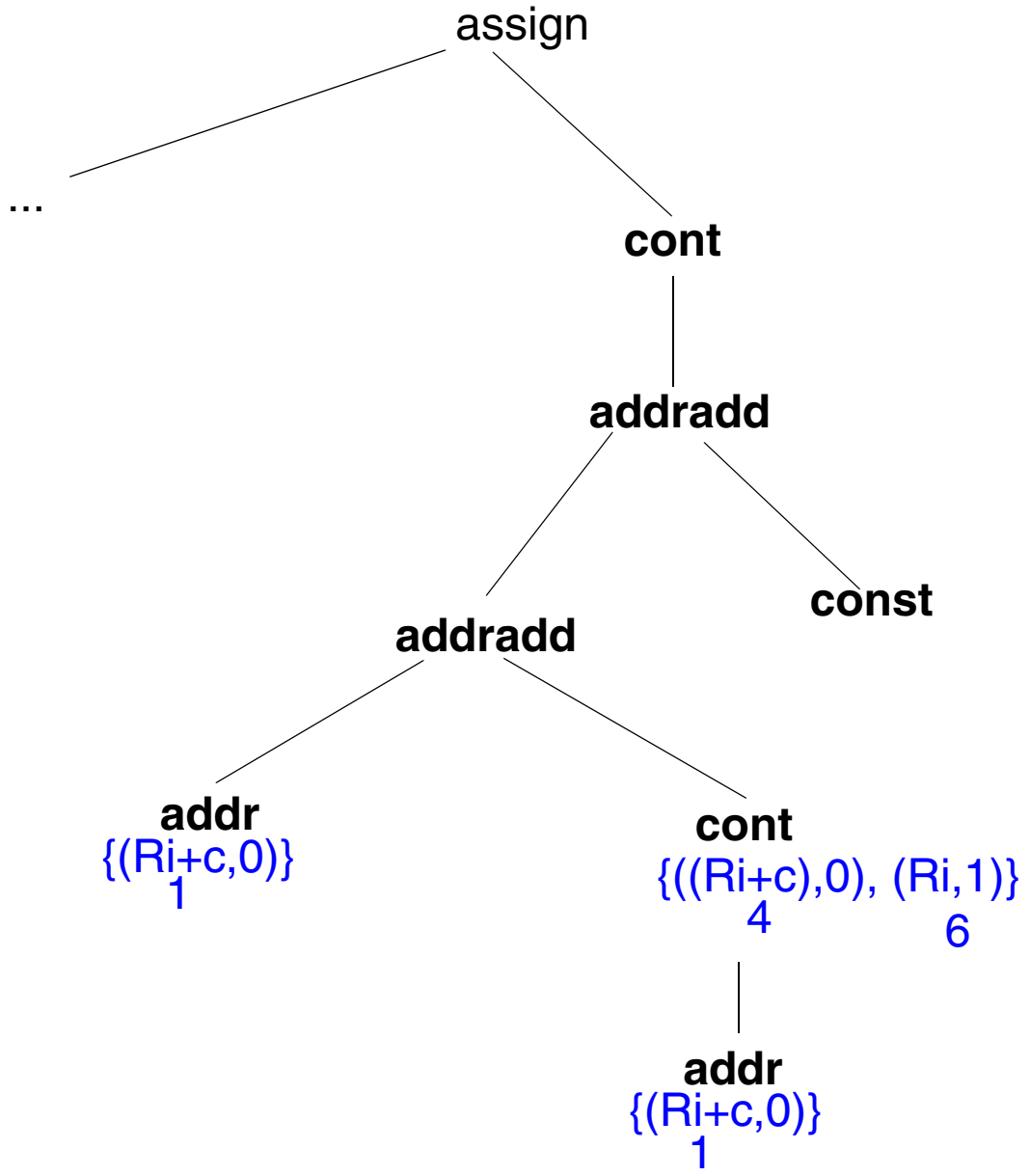
{ (value descriptor, costs)}



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Pattern Selection

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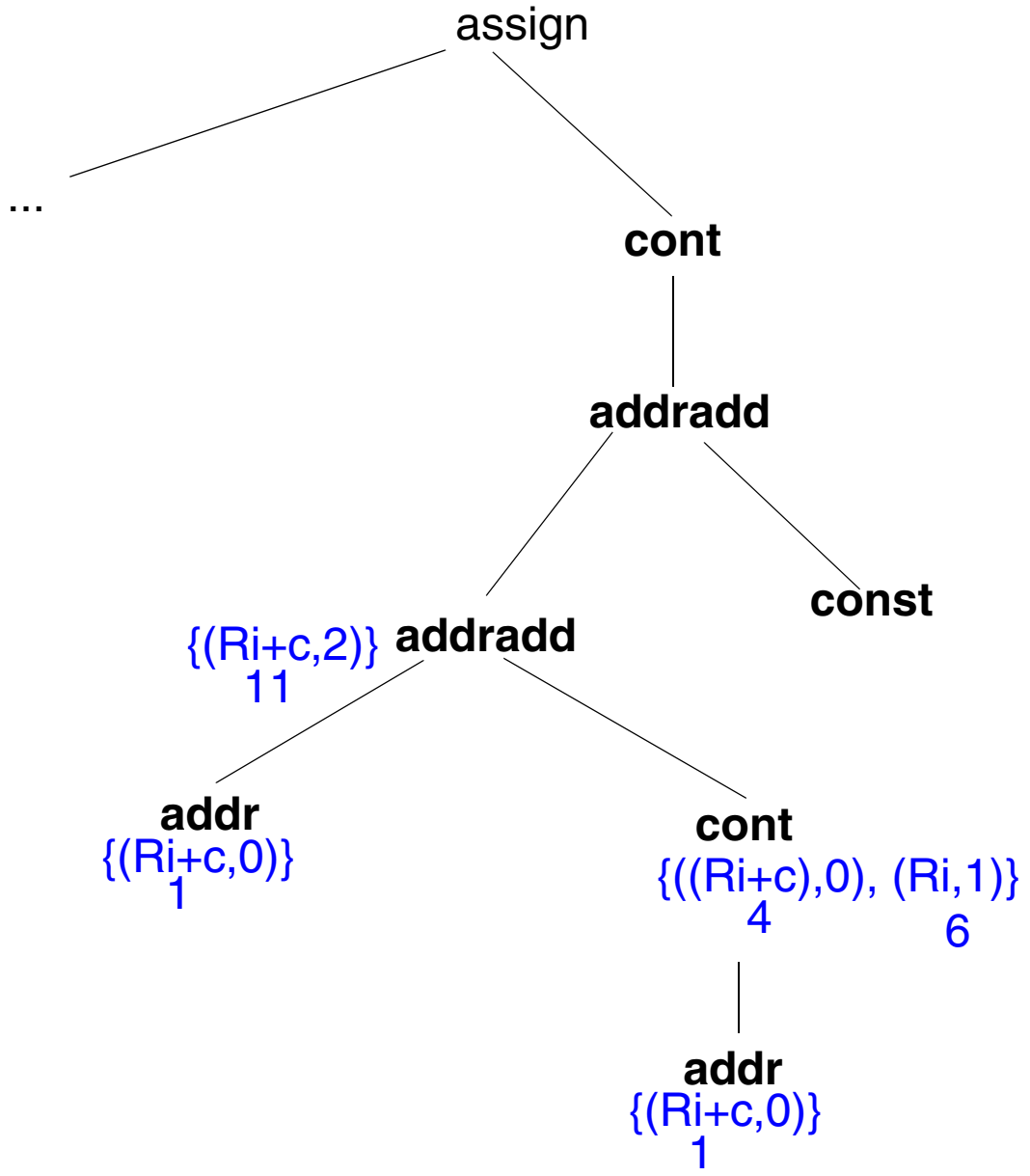
{ (value descriptor, costs)}



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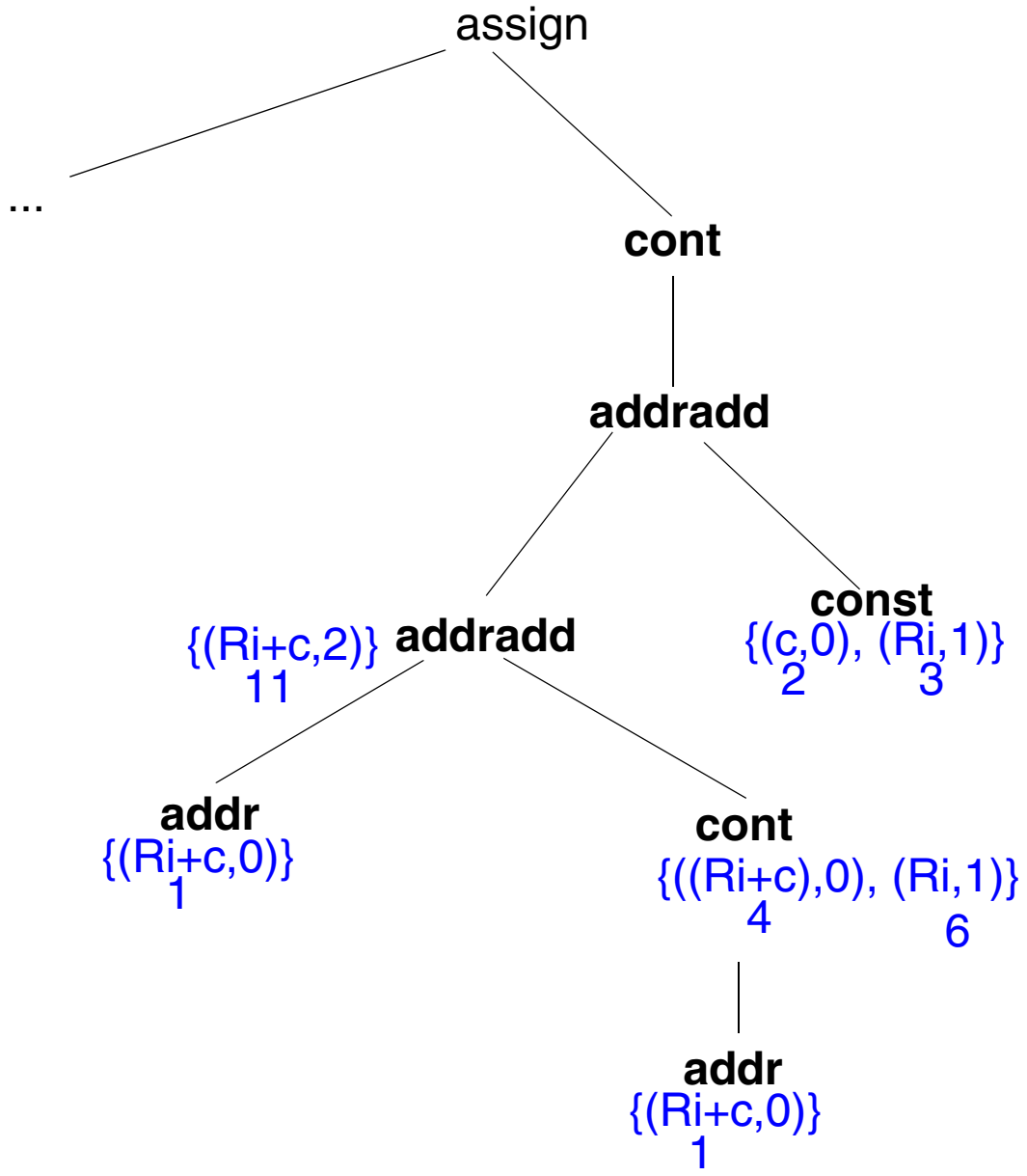
{ (value descriptor, costs)}



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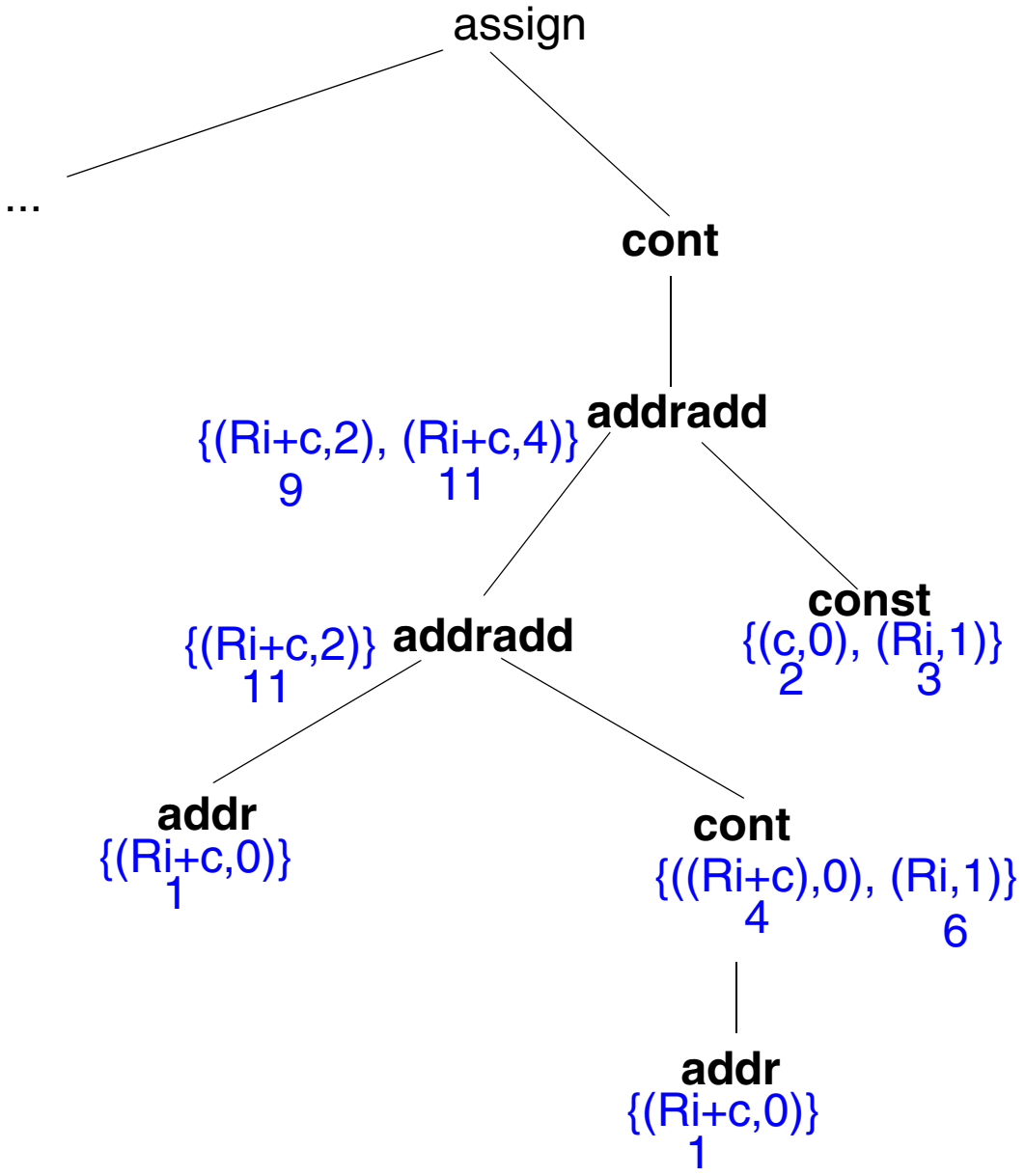
{ (value descriptor, costs)}



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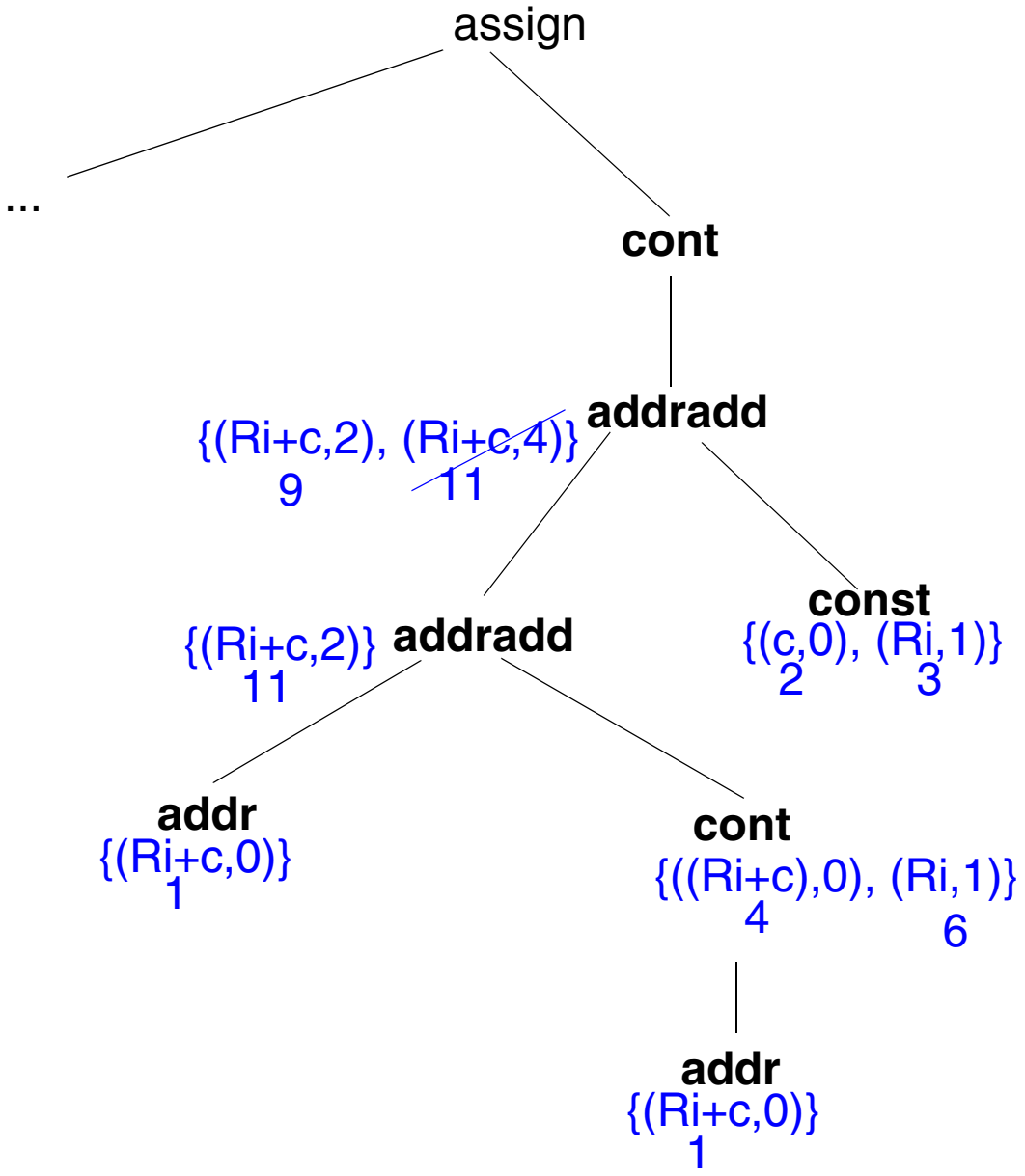
{ (value descriptor, costs)}



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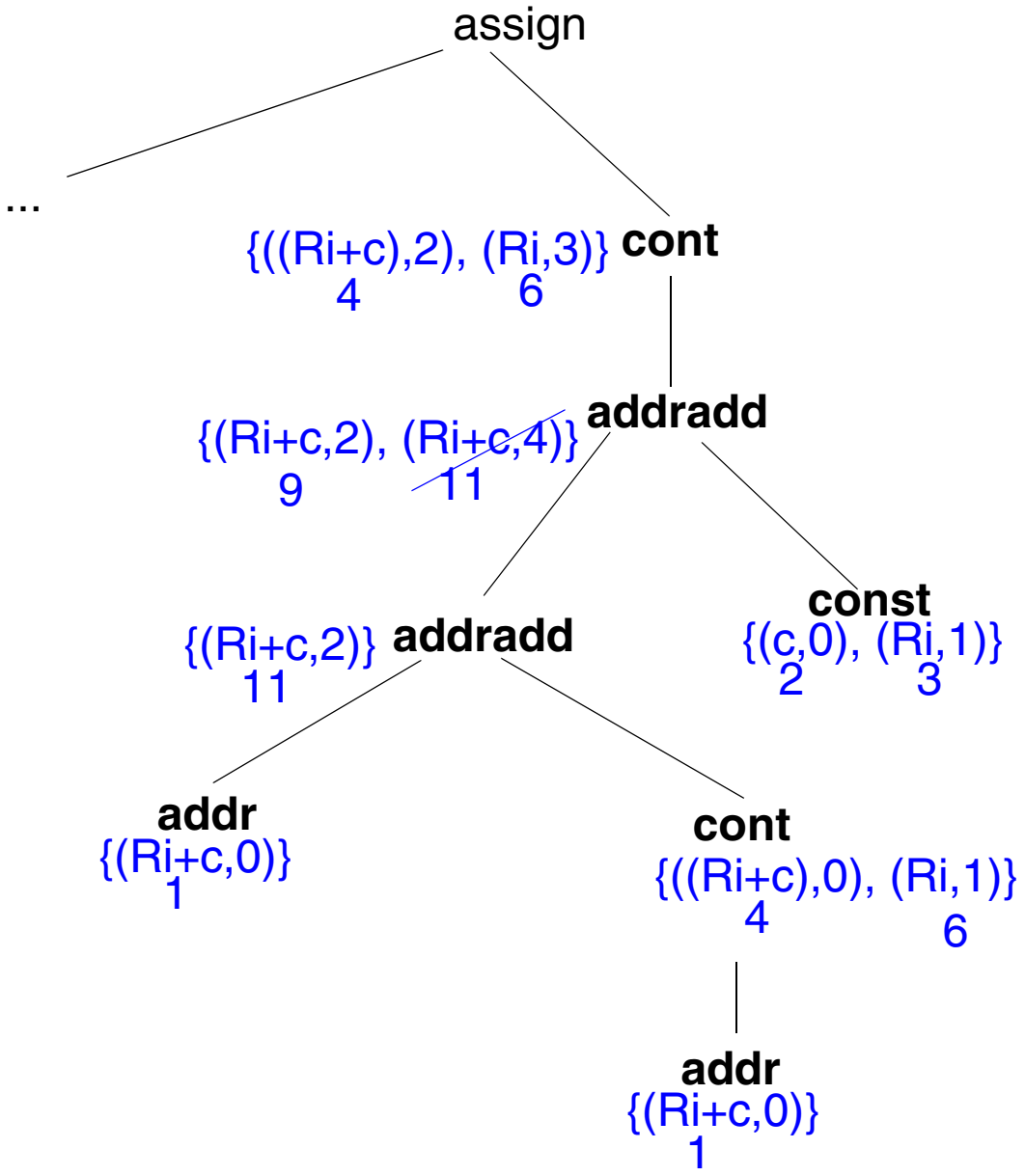

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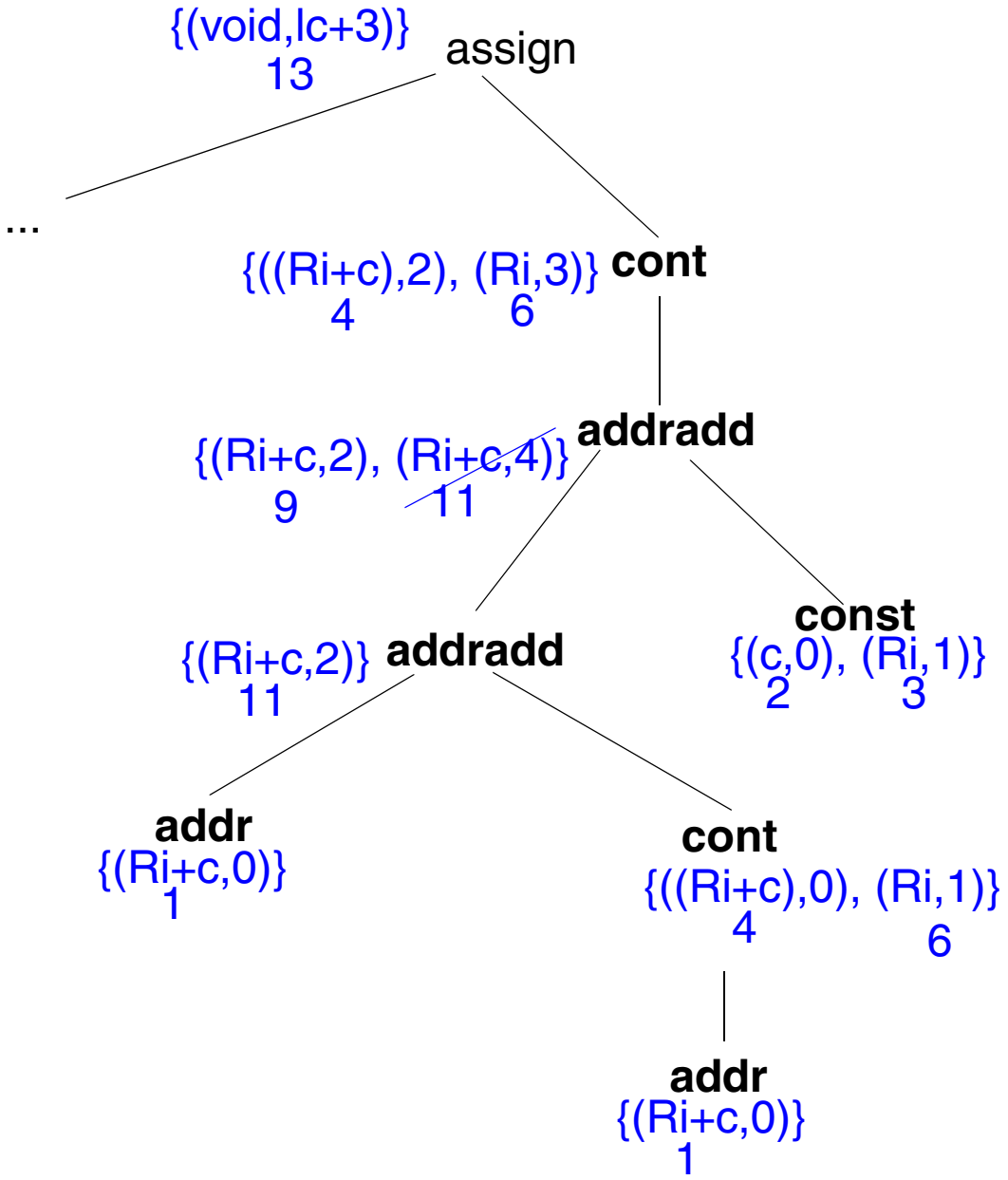

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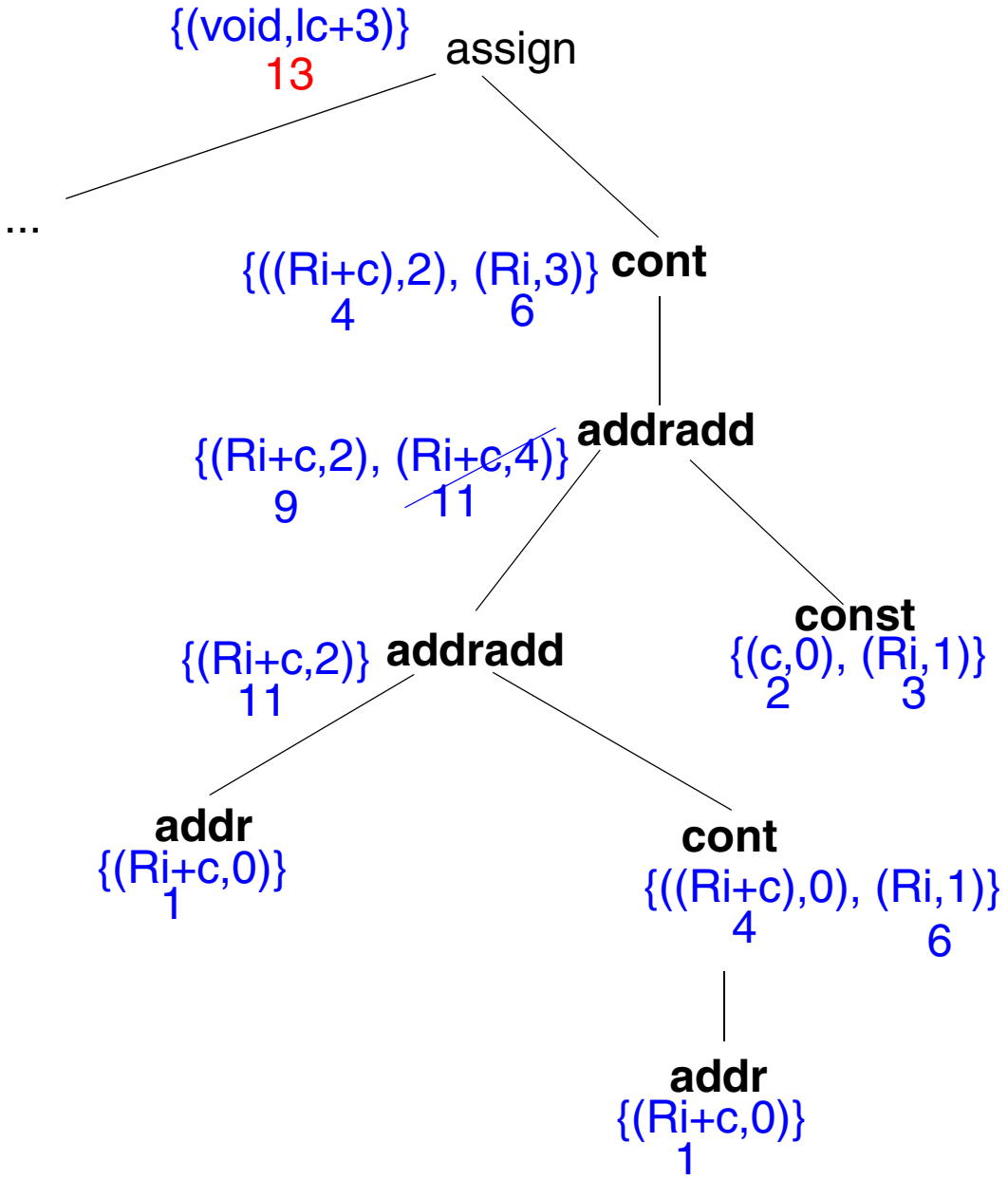
Pattern Selection

Pass 1 bottom-up:

Annotate the nodes with
sets of pairs
{ (value descriptor, costs)}

Pass 2 top-down:

Select for each node the
cheapest pattern,
that fits to the selection
made above.



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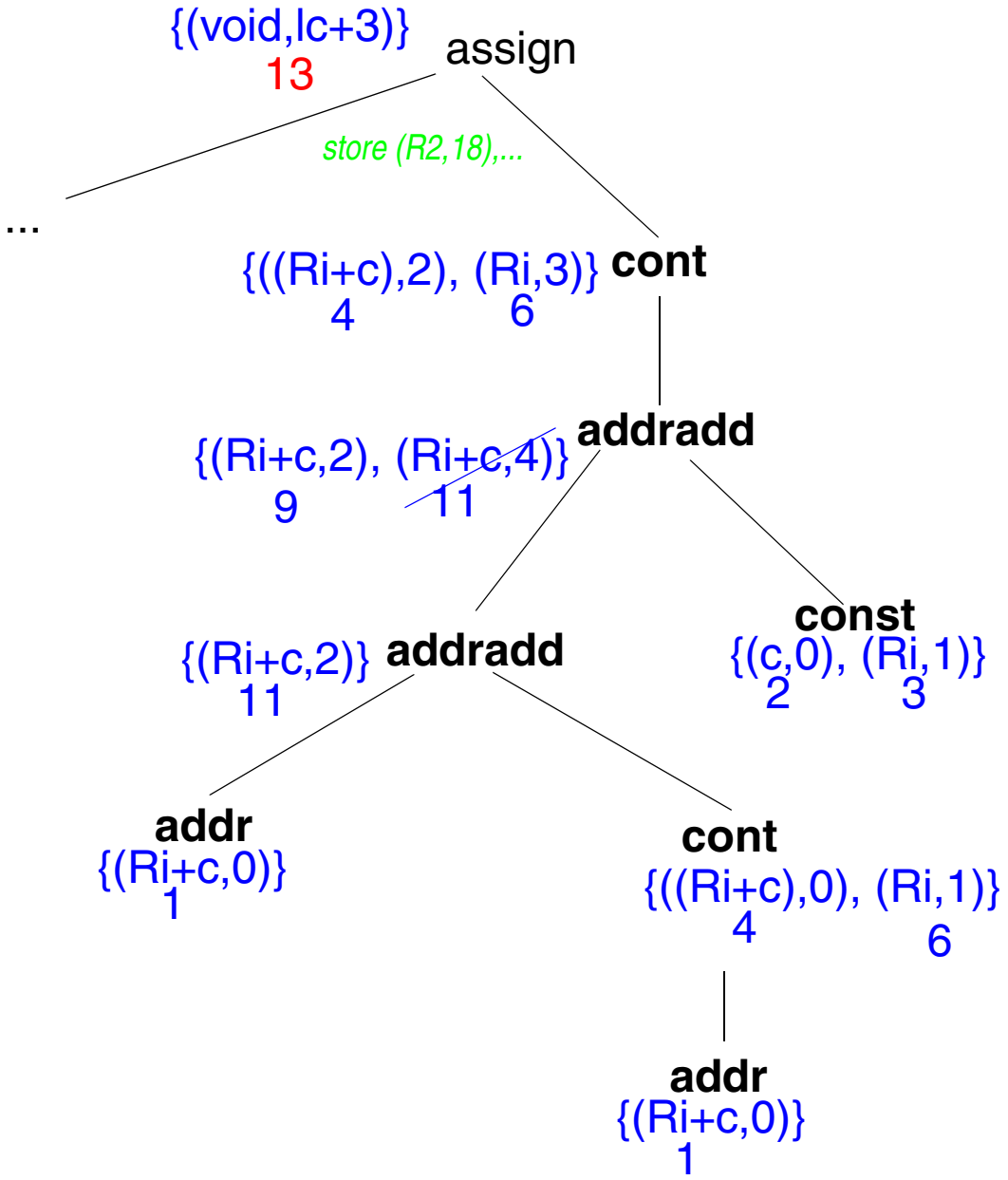

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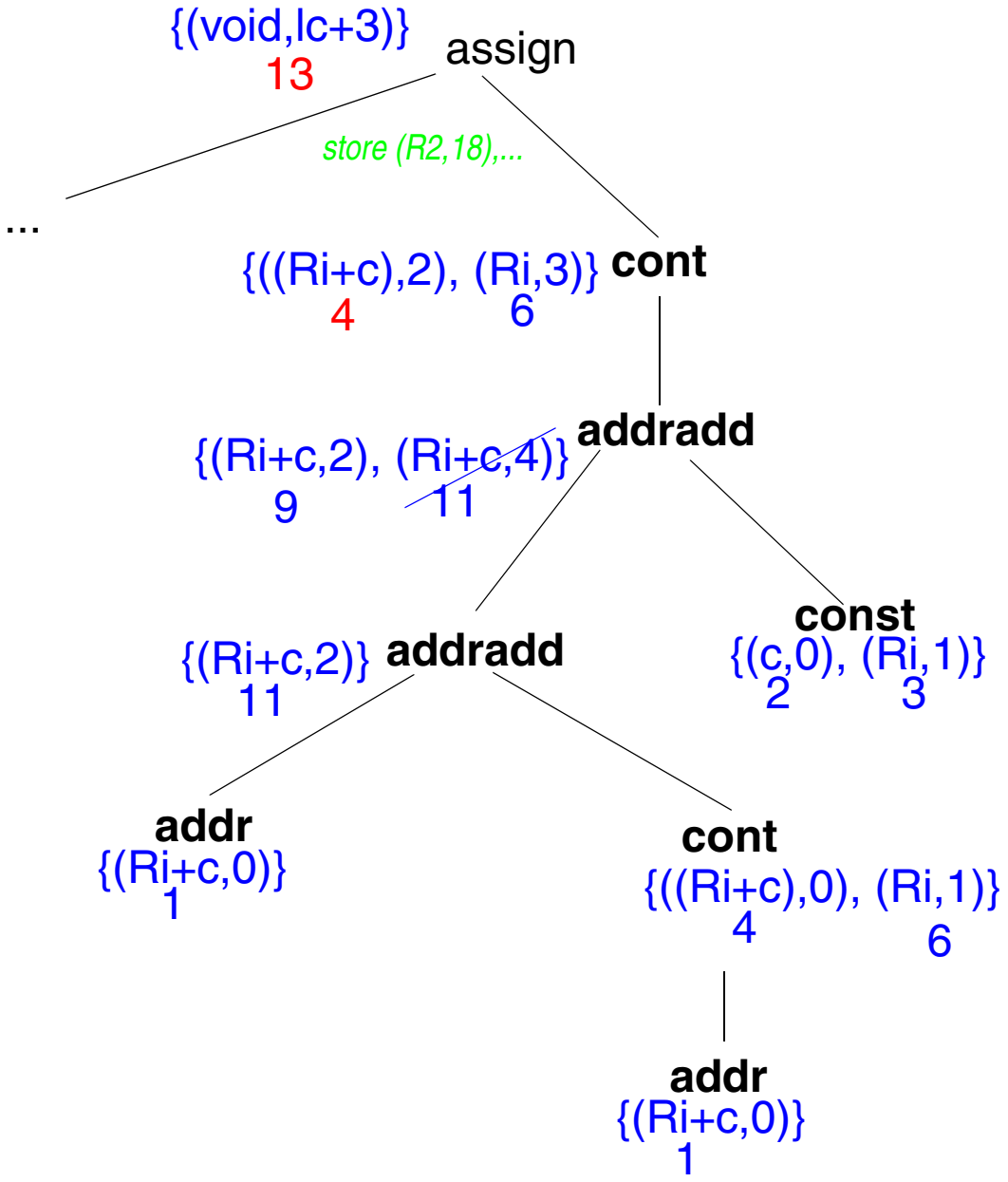

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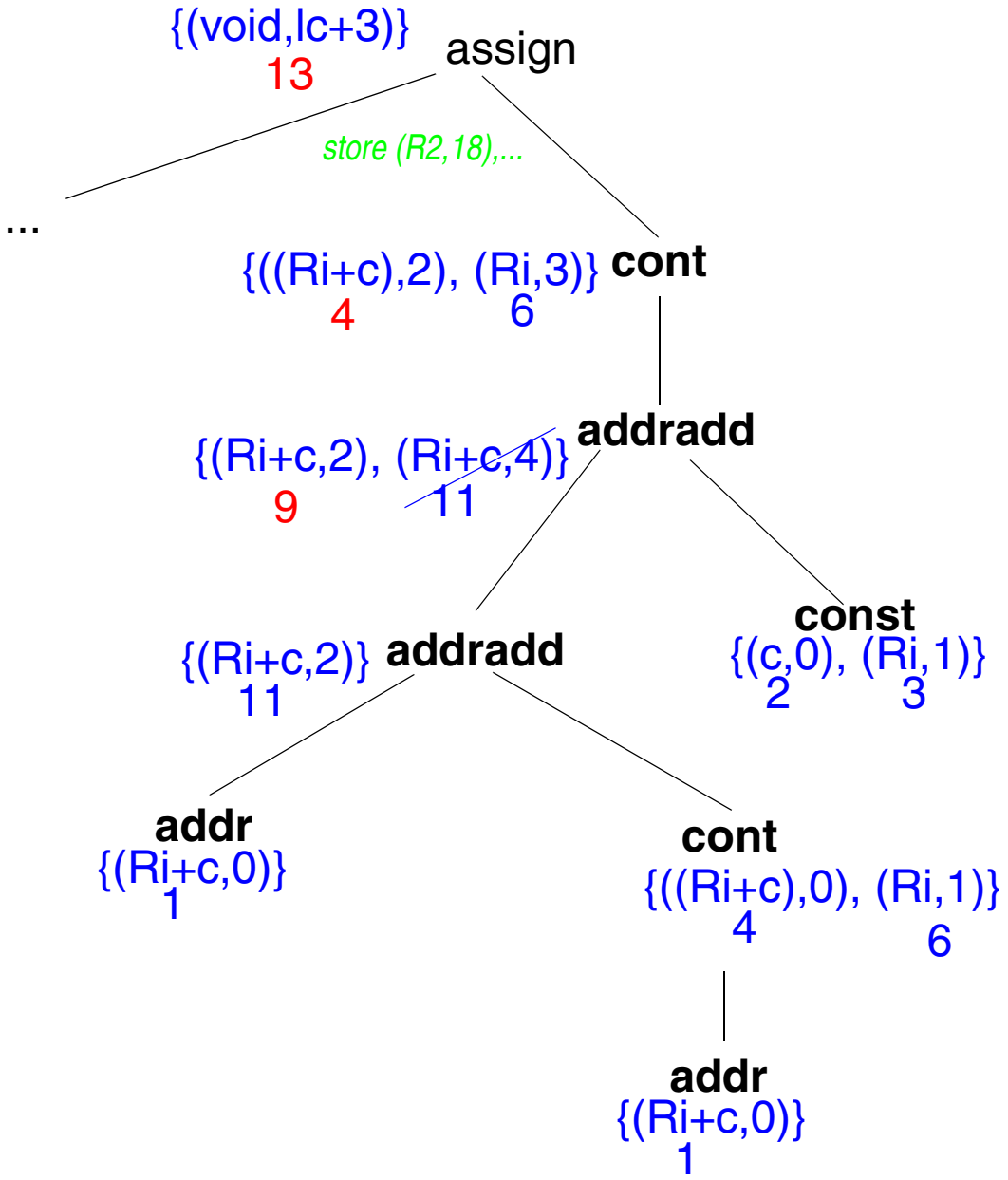

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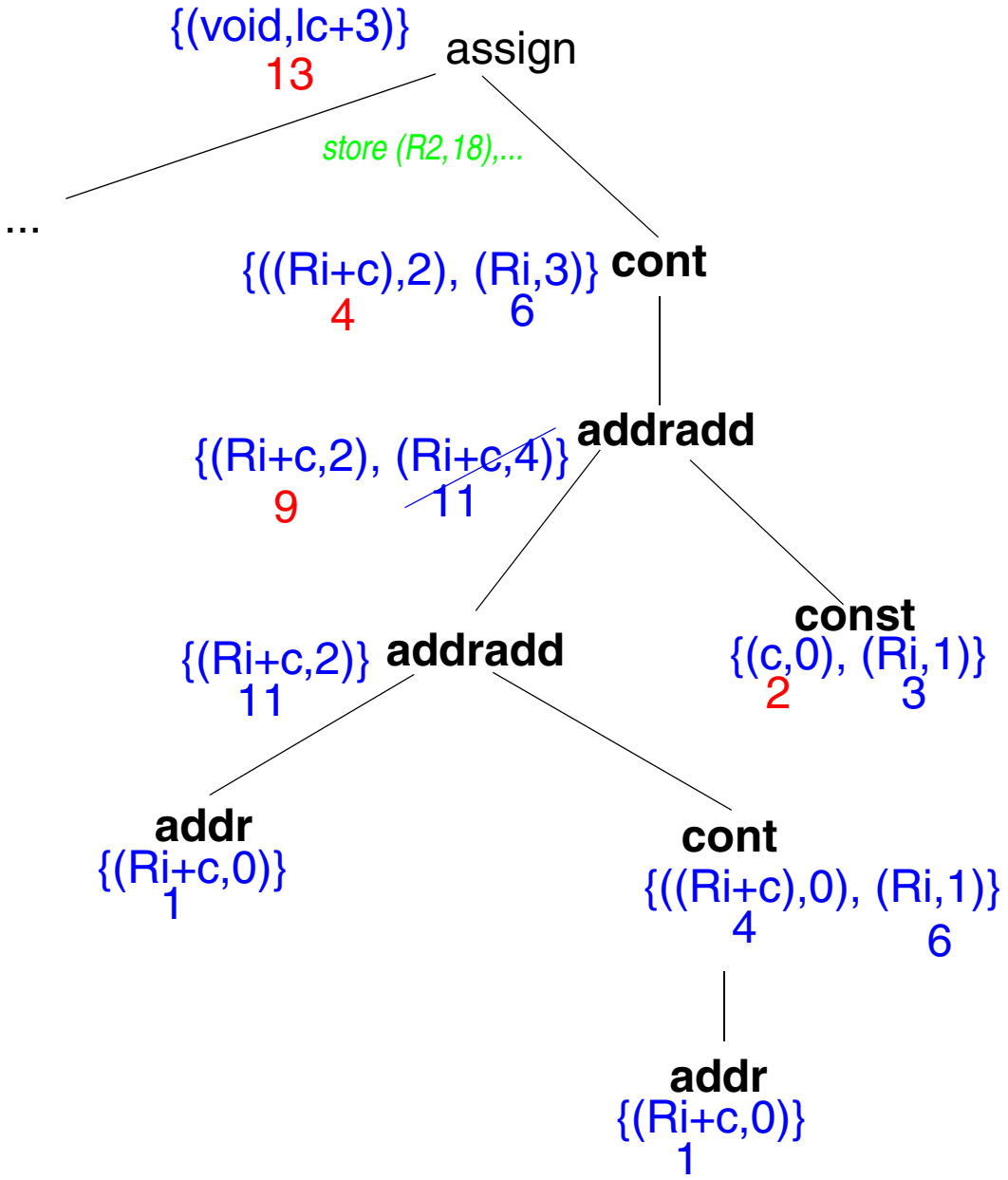

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Annotate the nodes with
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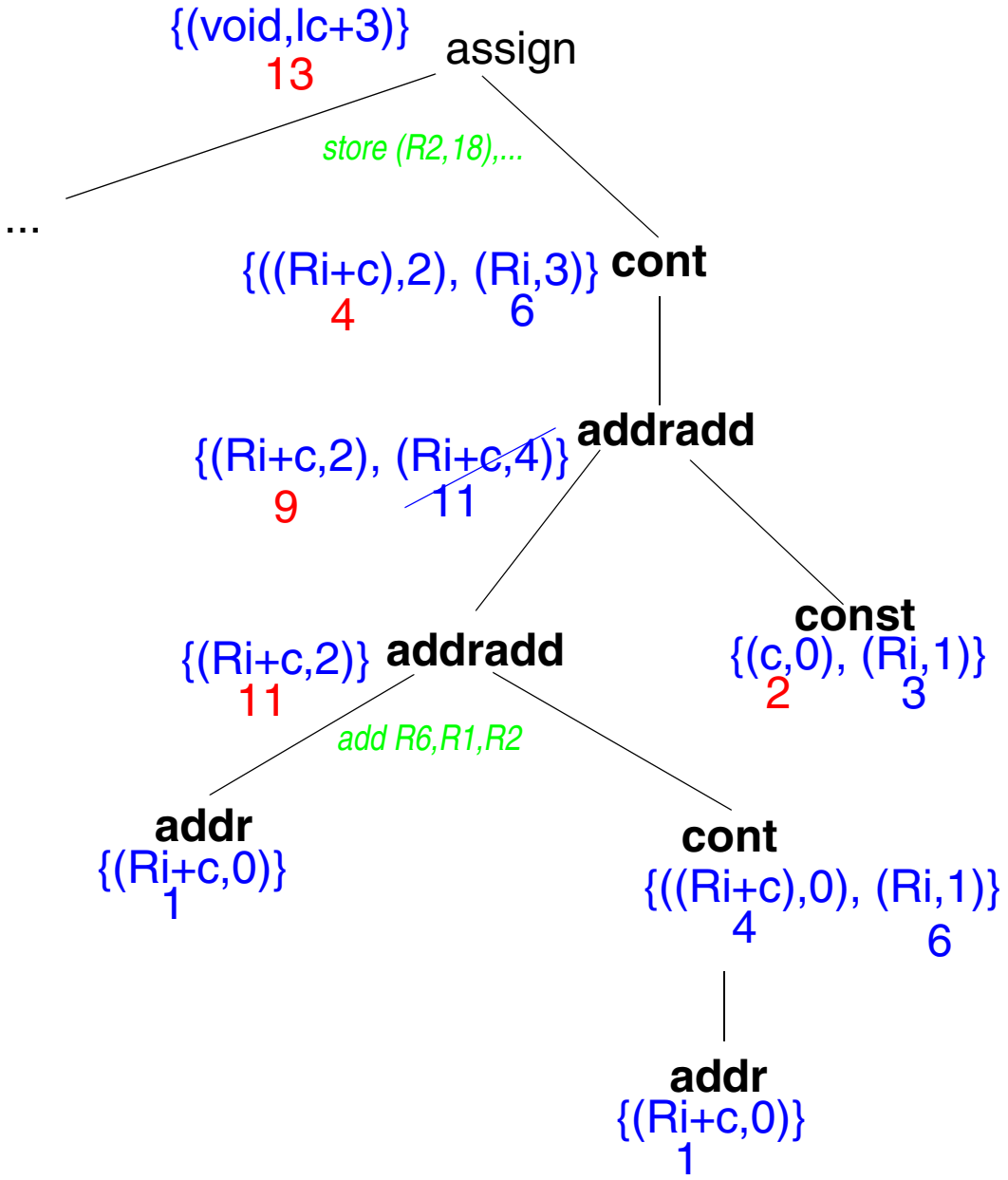

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Annotate the nodes with
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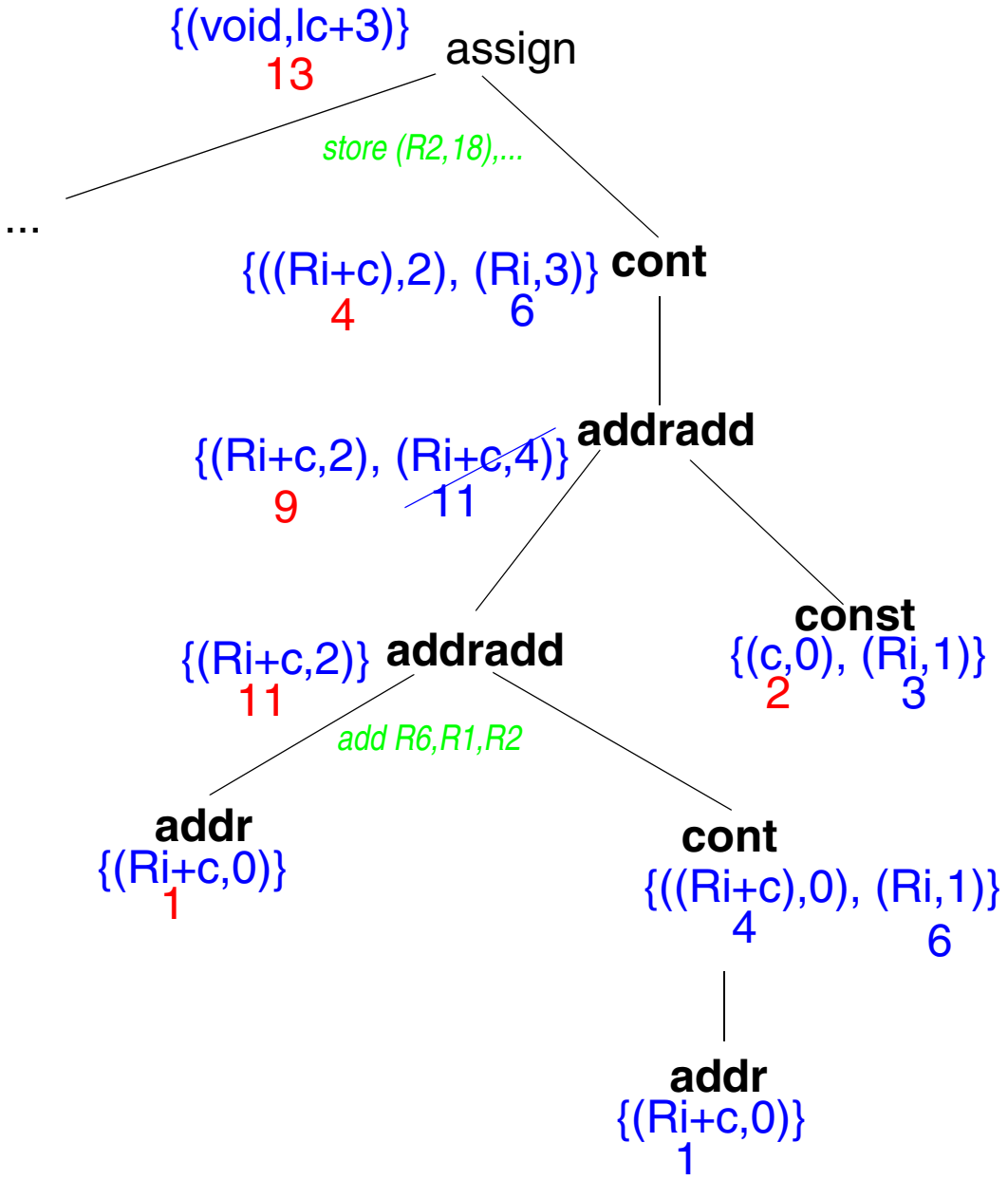

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Annotate the nodes with
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{ (value descriptor, costs)}

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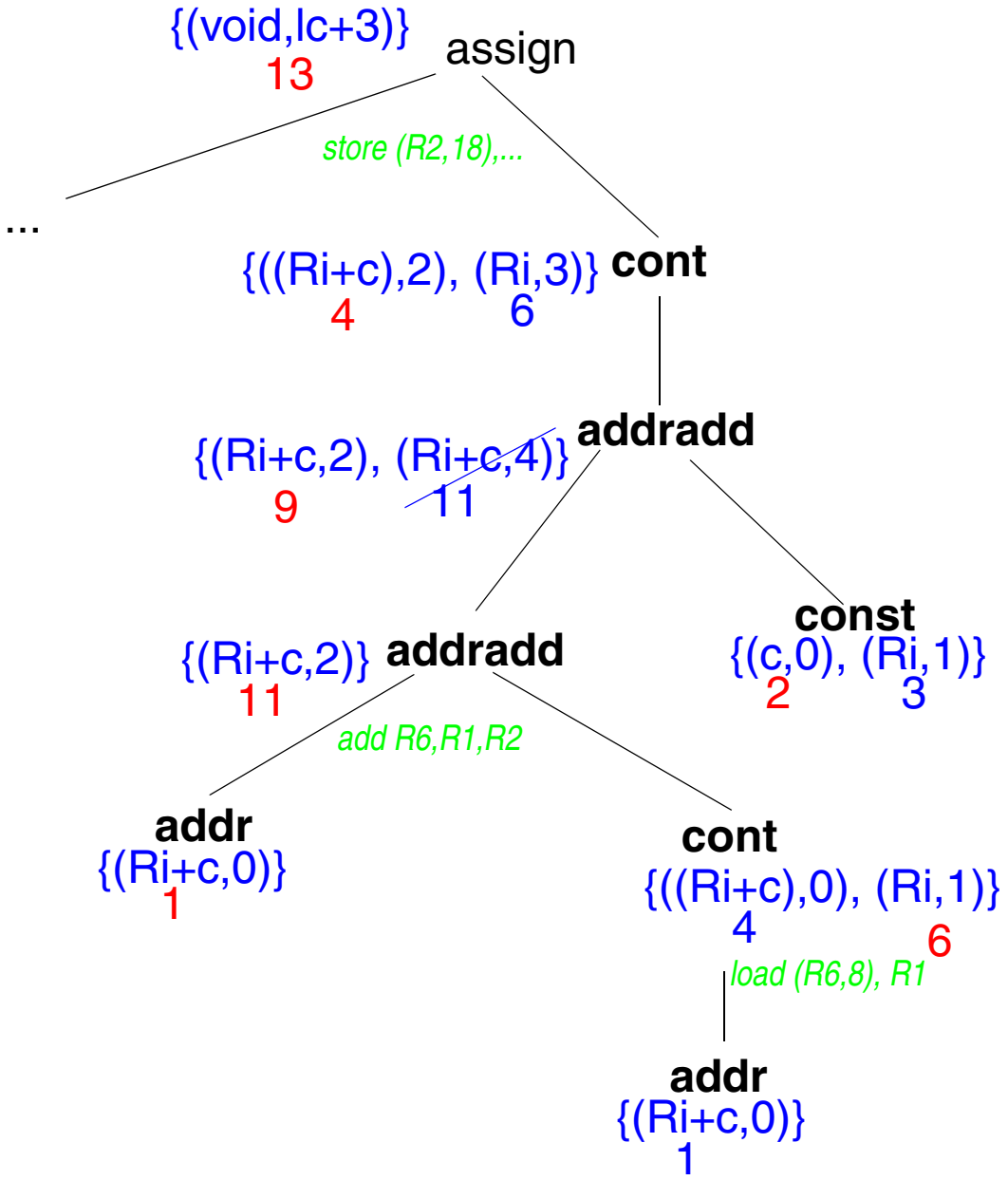

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Pattern Selection

Pass 1 bottom-up:

Annotate the nodes with
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{ (value descriptor, costs)}

Pass 2 top-down:

Select for each node the
cheapest pattern,
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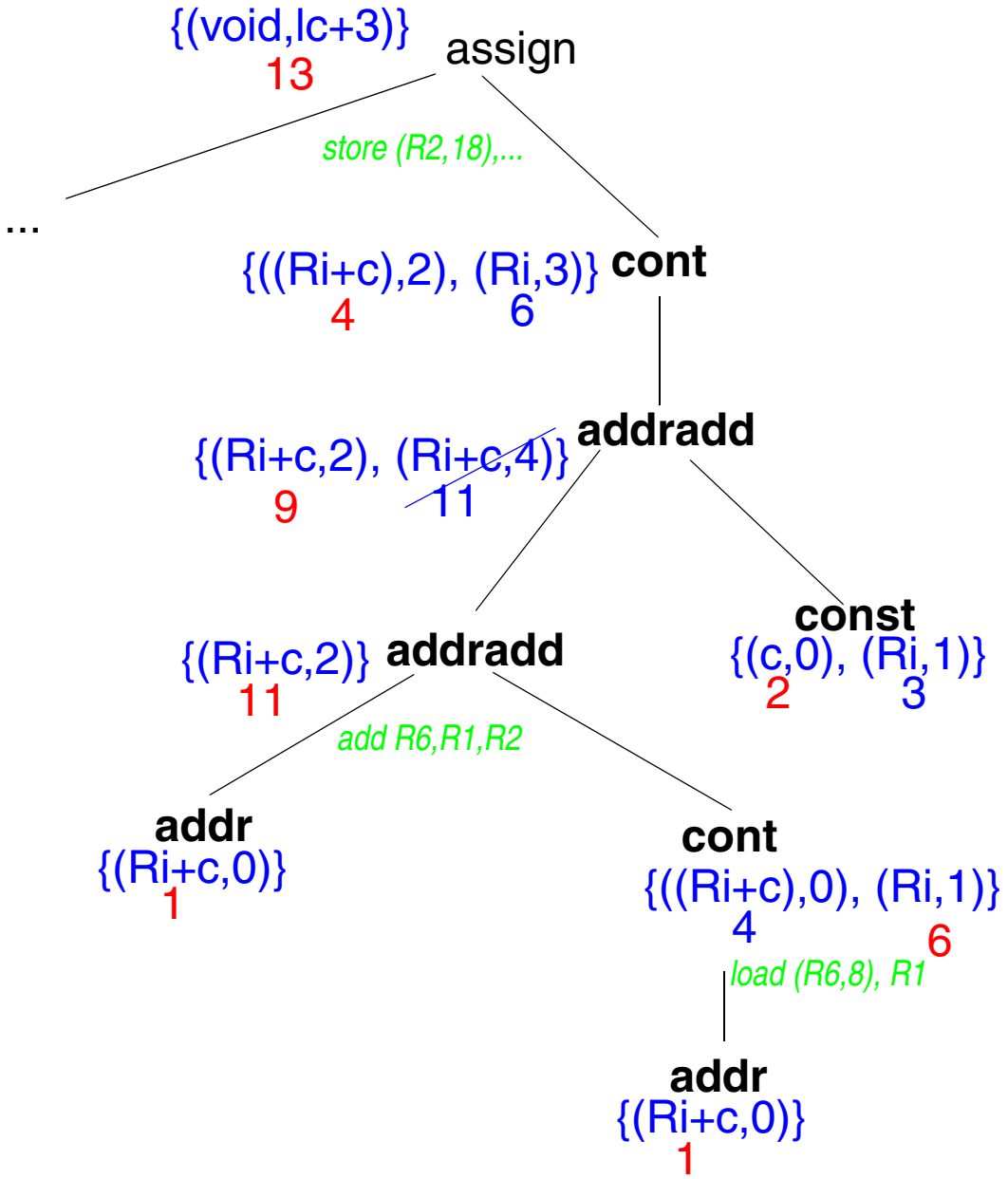
made above.



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Pattern Selection

Pass 1 bottom-up:

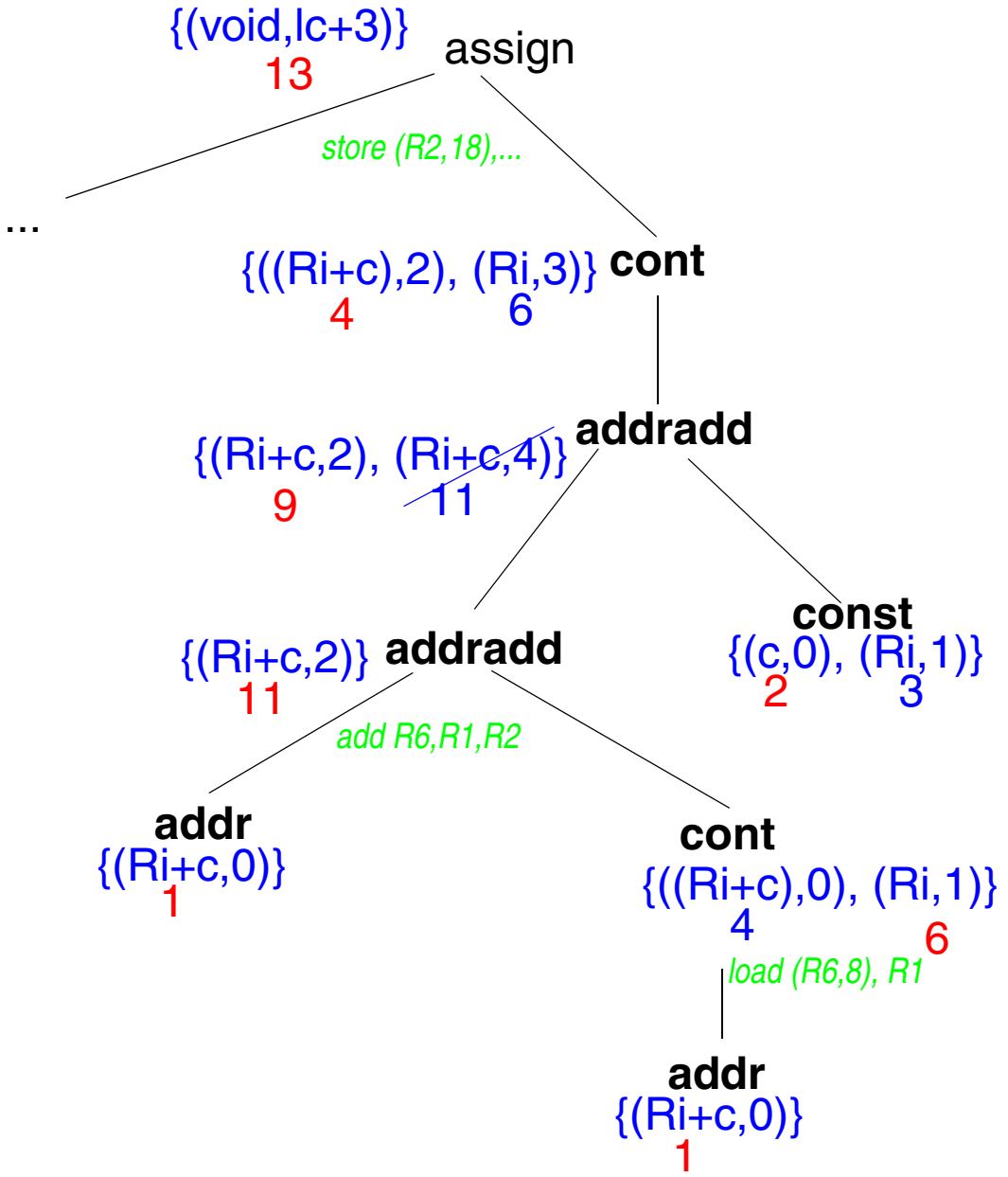
Annotate the nodes with sets of pairs
{ (value descriptor, costs)}

Pass 2 top-down:

Select for each node the cheapest pattern, that fits to the selection made above.

Pass 3 bottom-up:

Emit code.



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Pattern Selection

Pass 1 bottom-up:

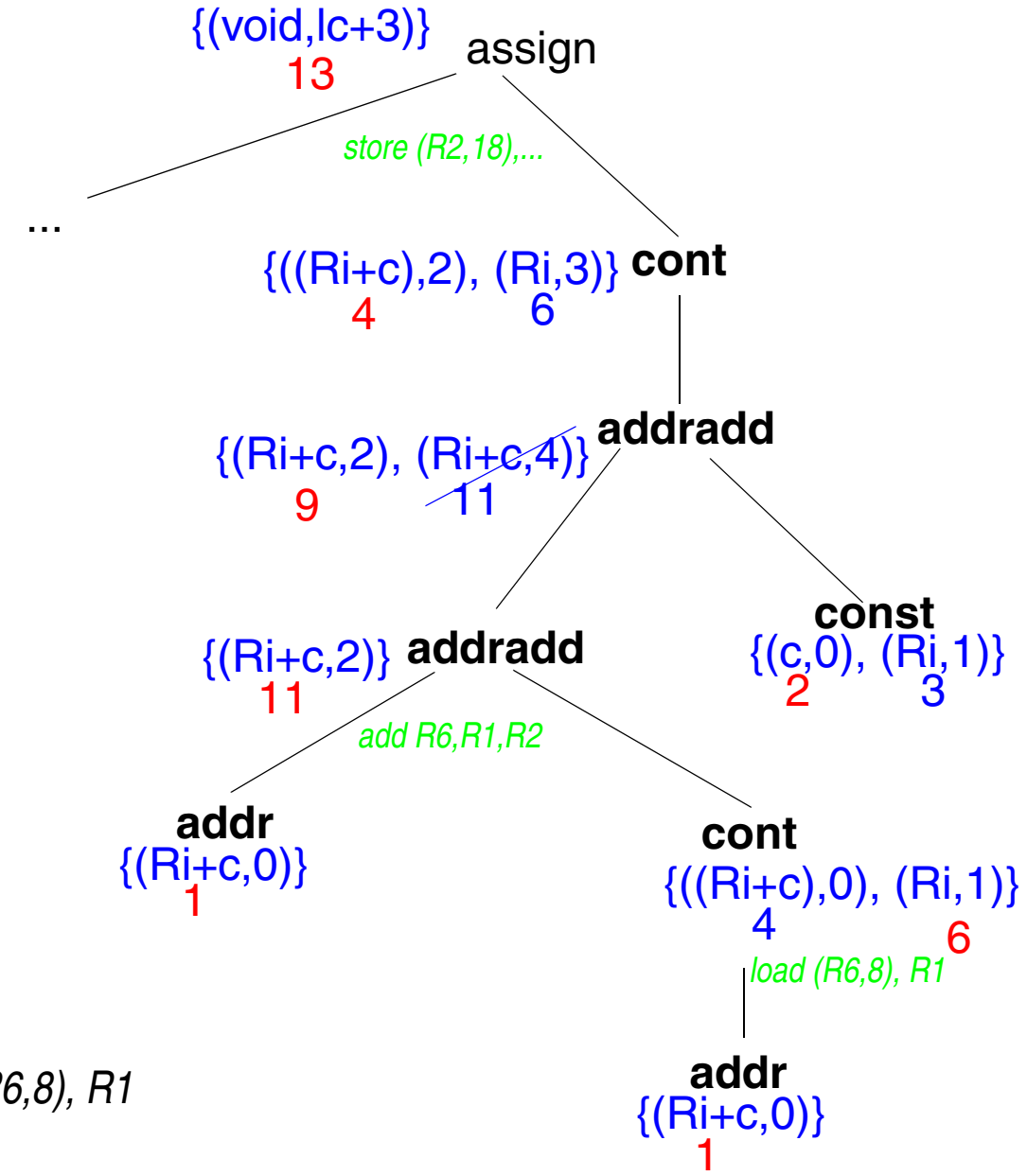
Annotate the nodes with sets of pairs
{ (value descriptor, costs)}

Pass 2 top-down:

Select for each node the cheapest pattern, that fits to the selection made above.

Pass 3 bottom-up:

Emit code.



load (R6,8), R1

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Pattern Selection

Pass 1 bottom-up:

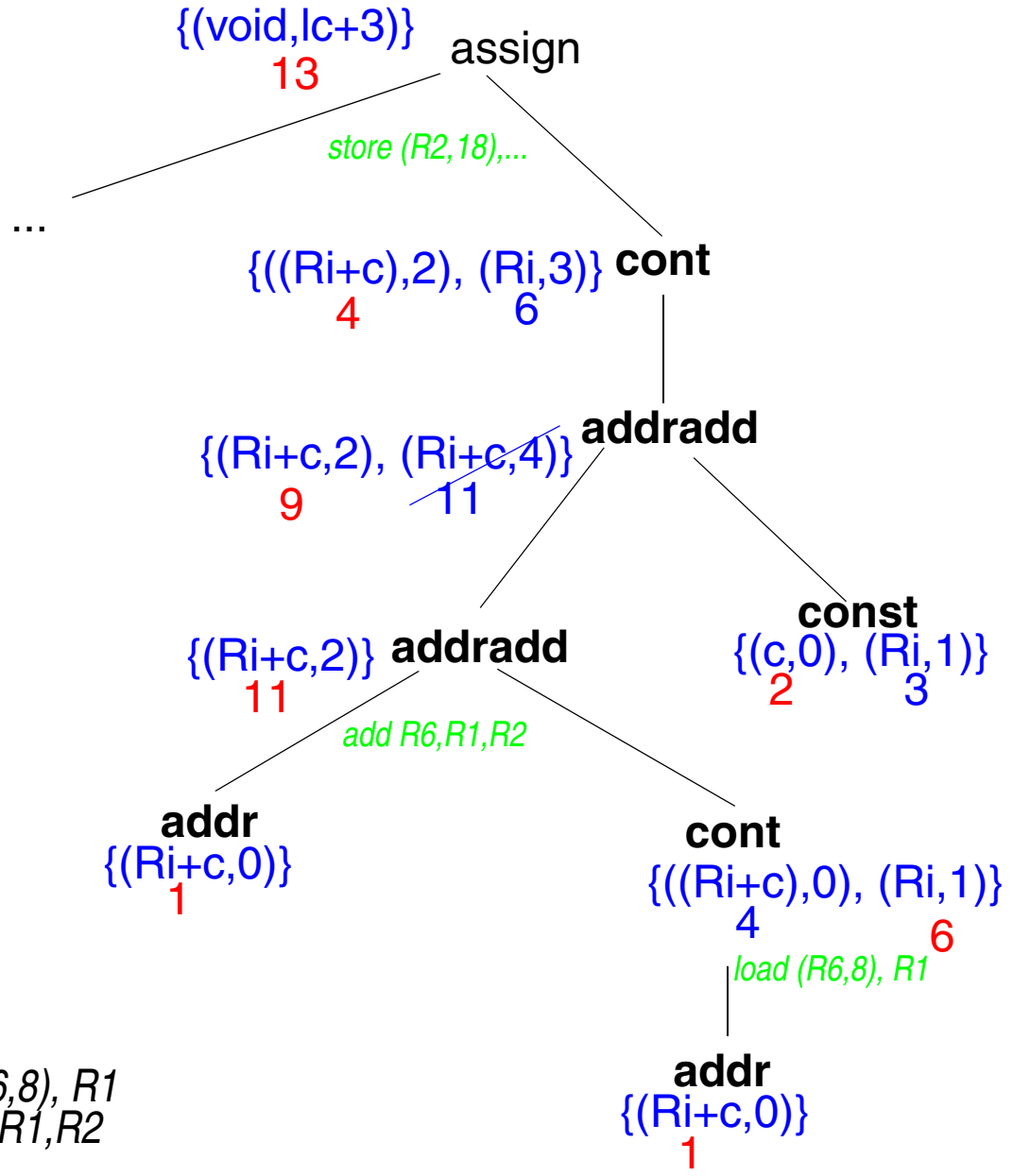
Annotate the nodes with sets of pairs
{ (value descriptor, costs)}

Pass 2 top-down:

Select for each node the cheapest pattern, that fits to the selection made above.

Pass 3 bottom-up:

Emit code.



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Pattern Selection

Pass 1 bottom-up:

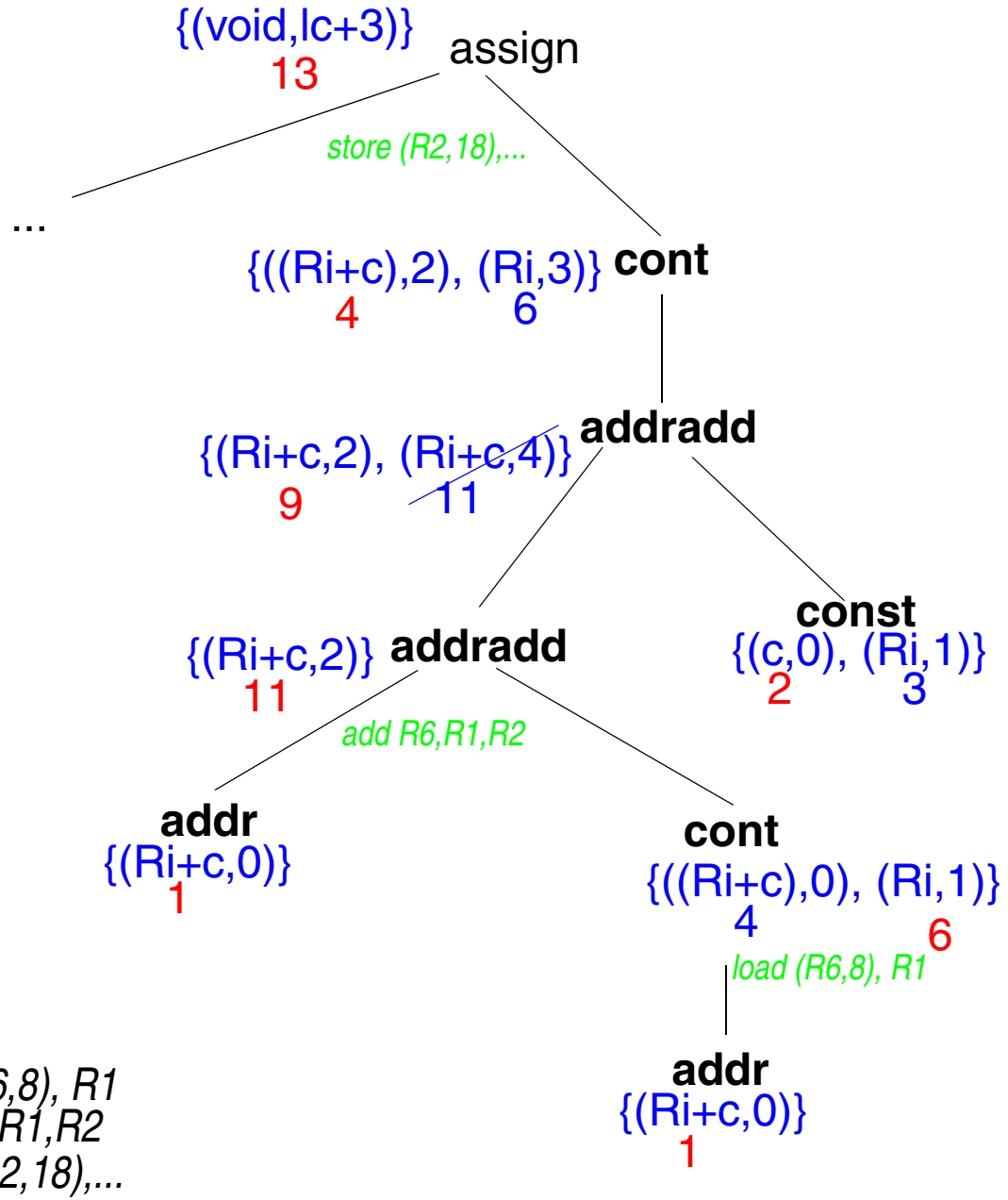
Annotate the nodes with sets of pairs
{ (value descriptor, costs)}

Pass 2 top-down:

Select for each node the cheapest pattern, that fits to the selection made above.

Pass 3 bottom-up:

Emit code.



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Pattern Selection

Pass 1 bottom-up:

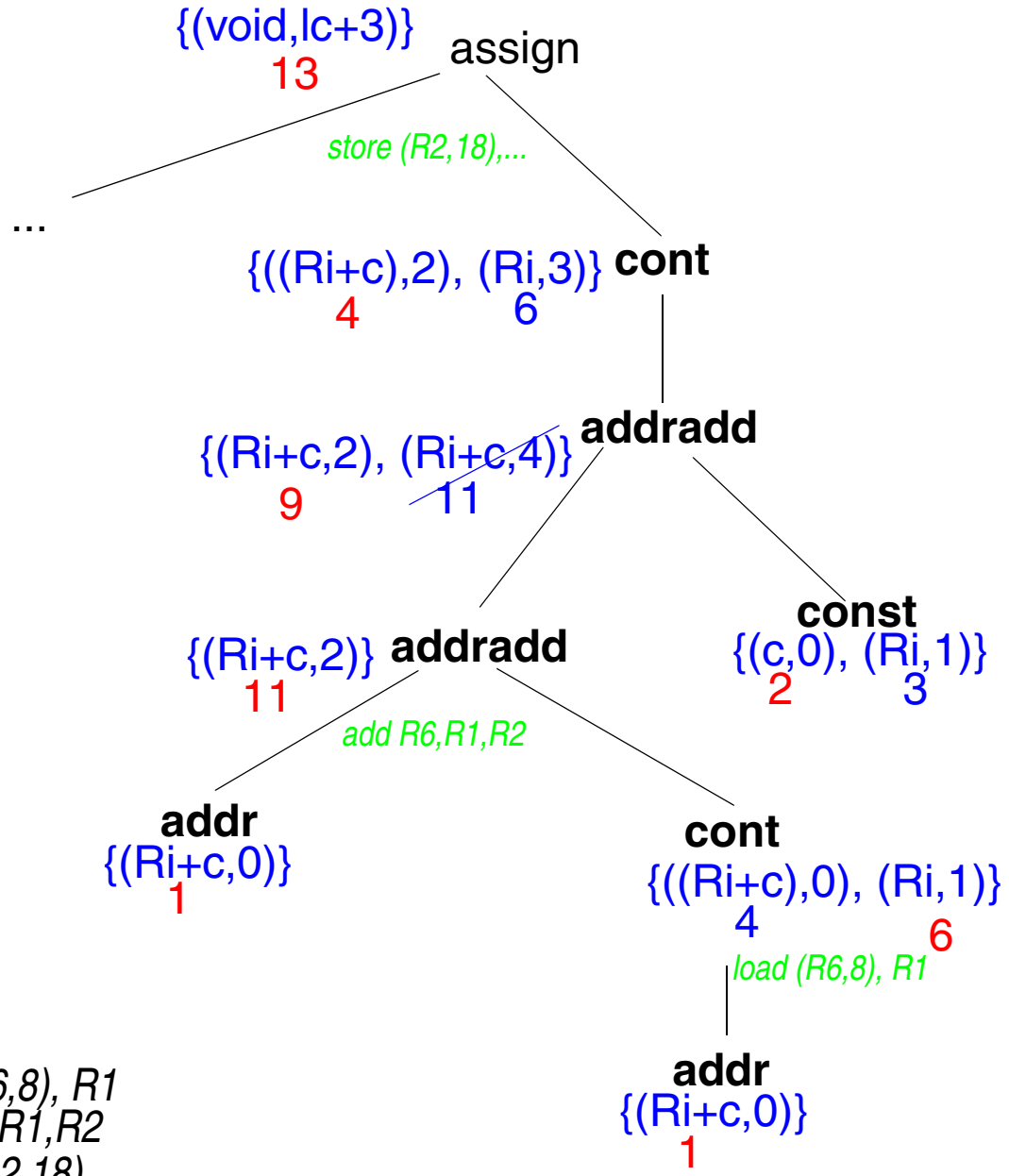
Annotate the nodes with sets of pairs
{ (value descriptor, costs)}

Pass 2 top-down:

Select for each node the cheapest pattern, that fits to the selection made above.

Pass 3 bottom-up:

Emit code.



load (R6,8), R1
add R6,R1,R2
store (R2,18),...

total cost: 3 instructions

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