CS 115 Lecture 8

Selection: the `if` statement

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  - `bool` (Booleans)

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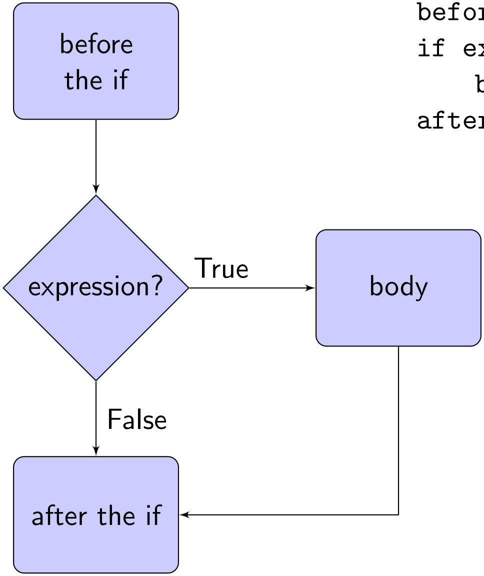

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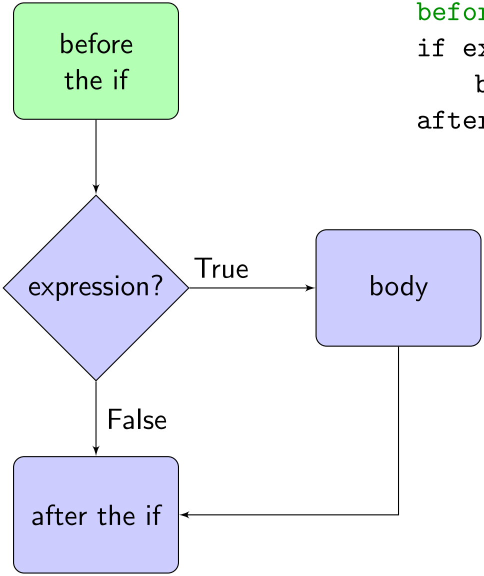

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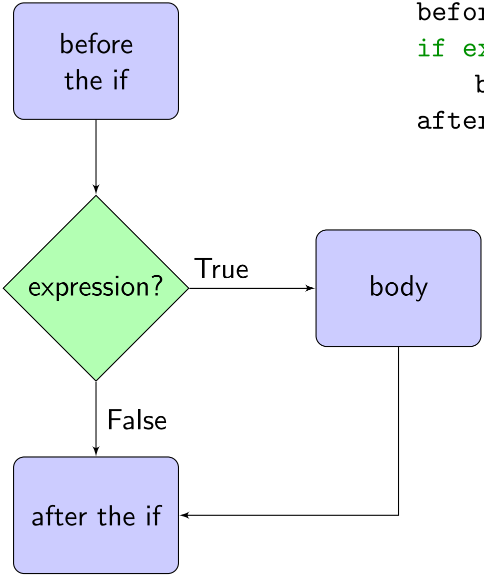

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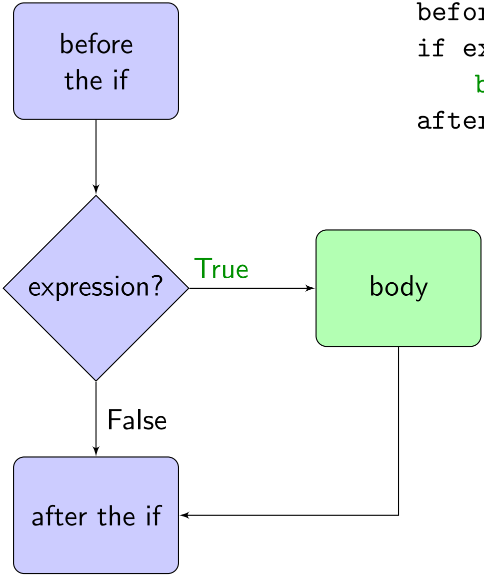

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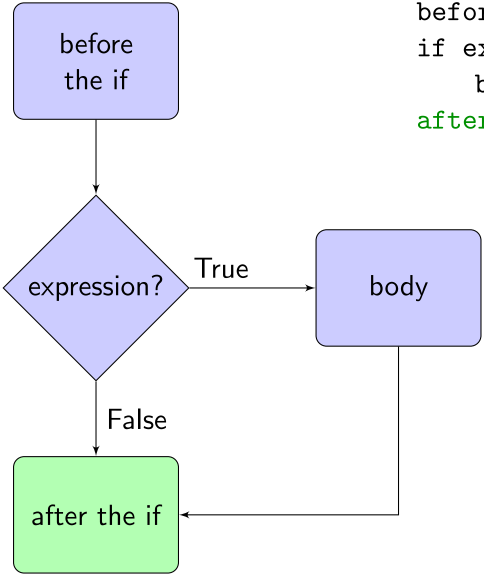

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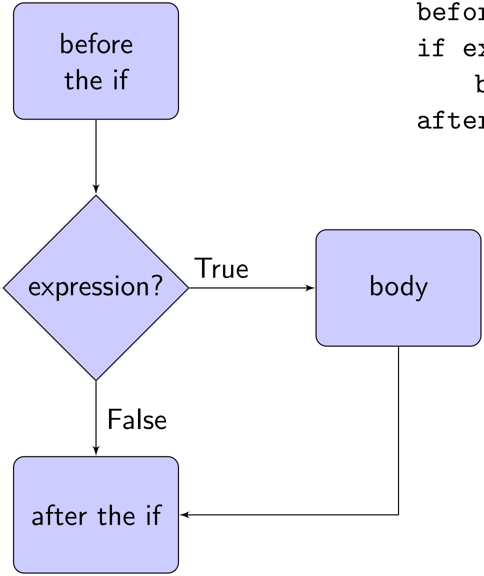

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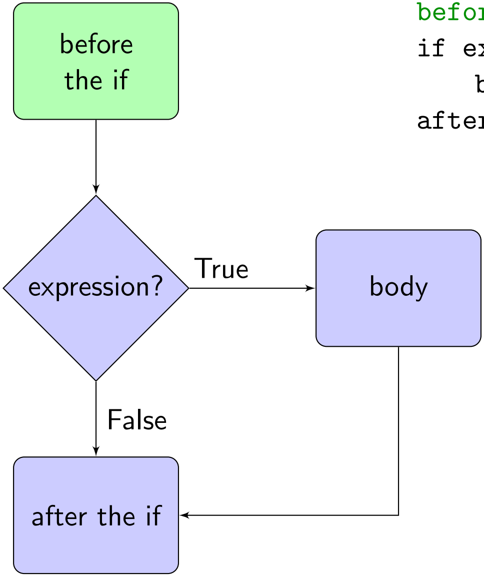

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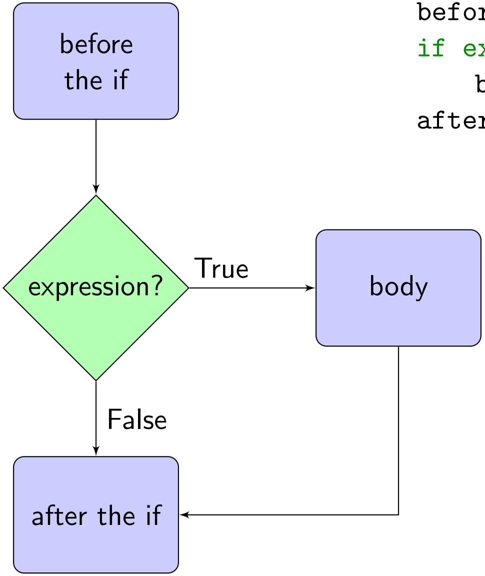

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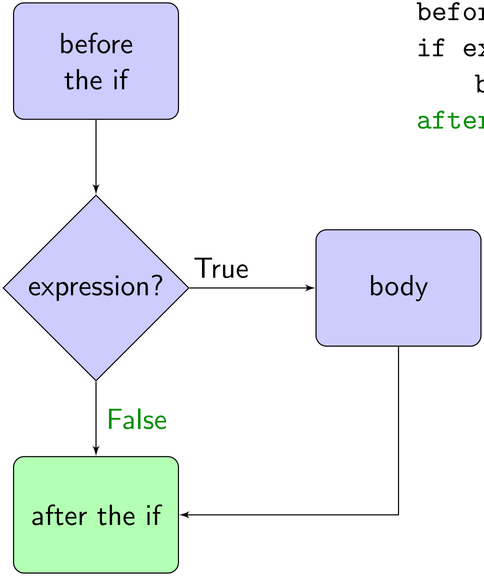

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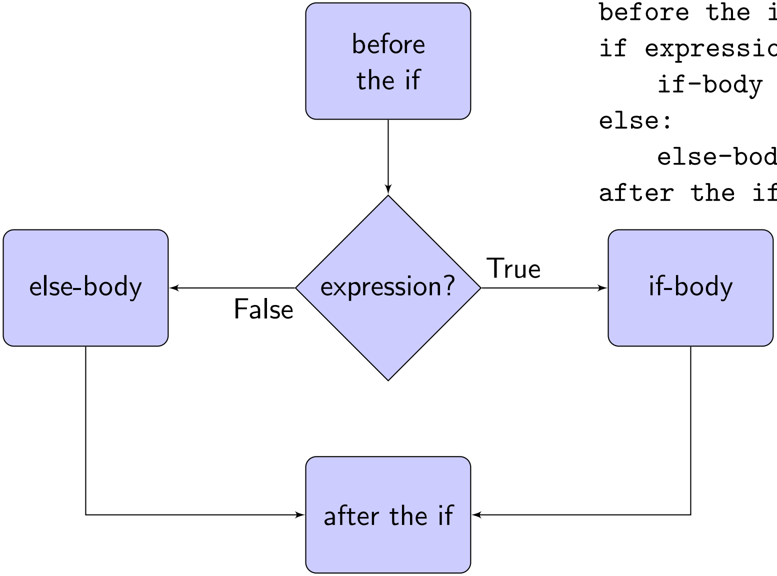

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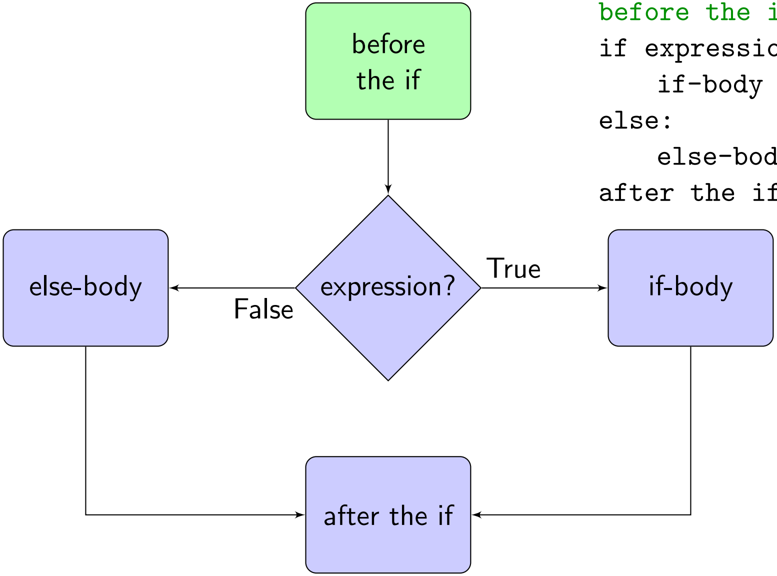

```
before the if
if expression:
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else:
    else-body
after the if
```
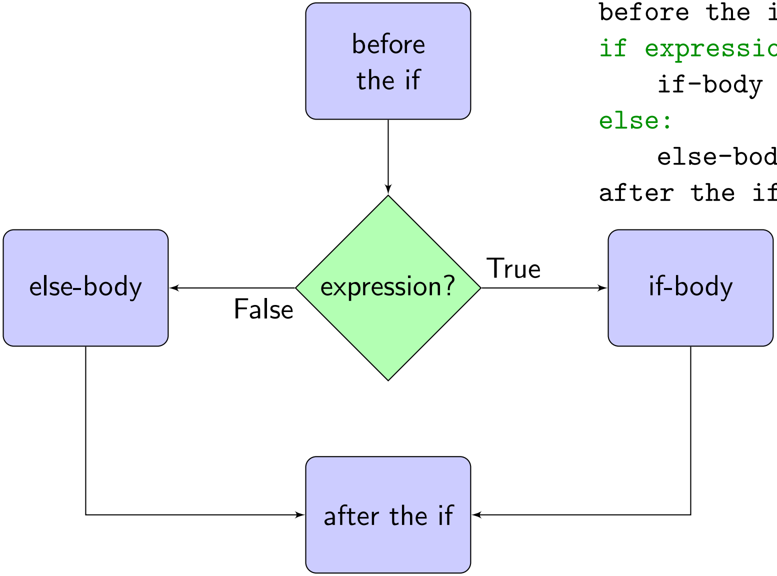

Flowchart for `if-else`



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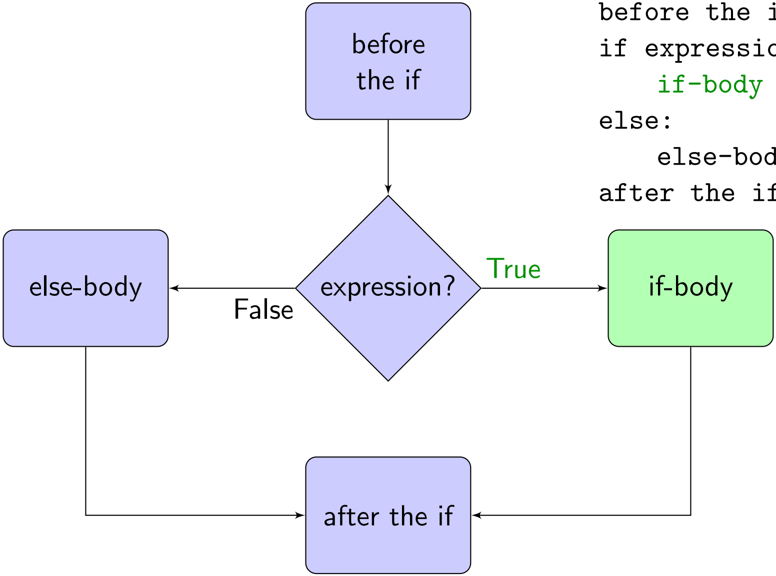

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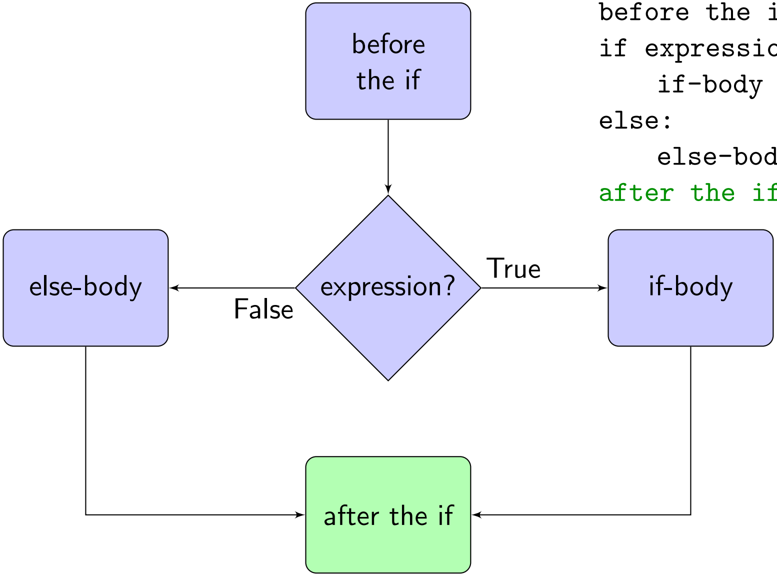

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after the if
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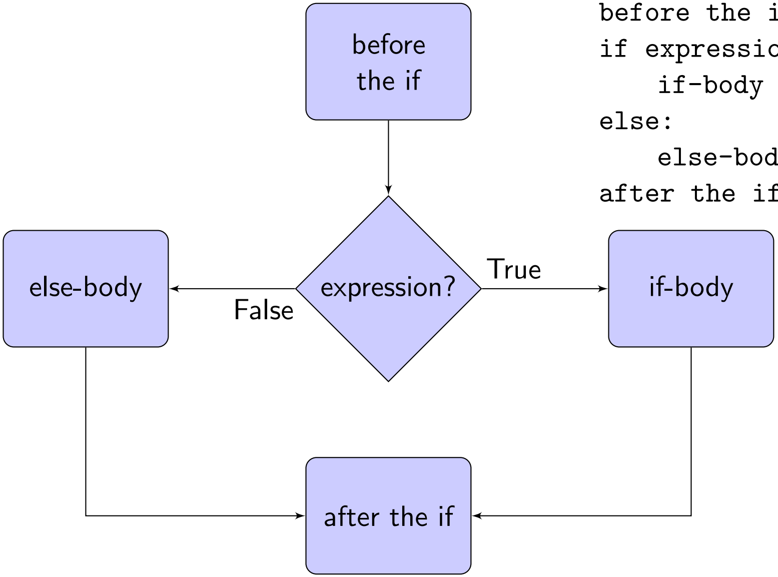
Flowchart for `if-else`



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after the if
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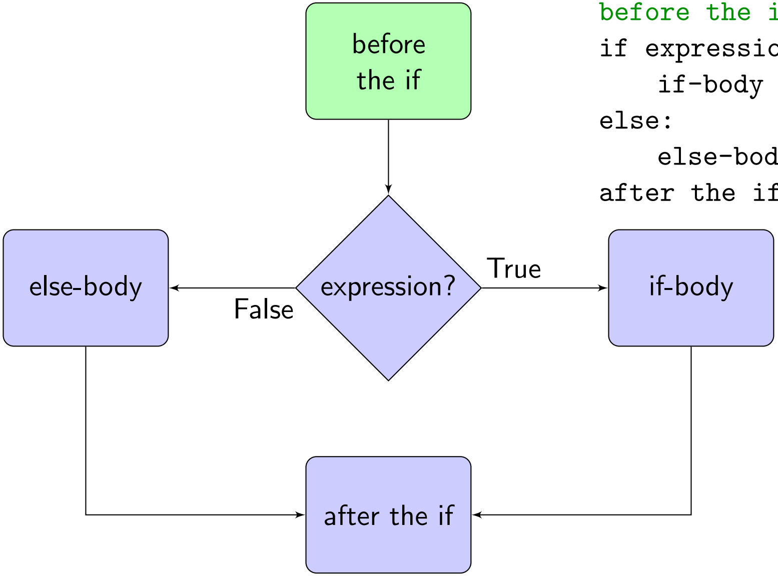

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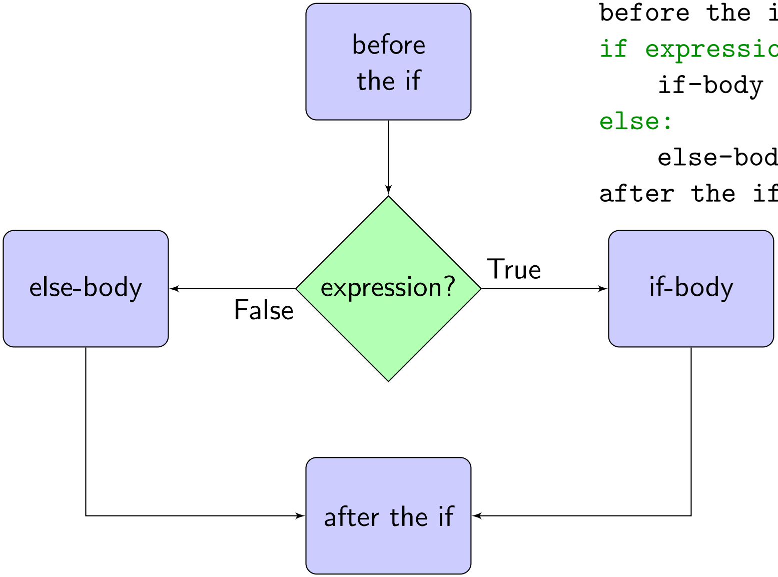

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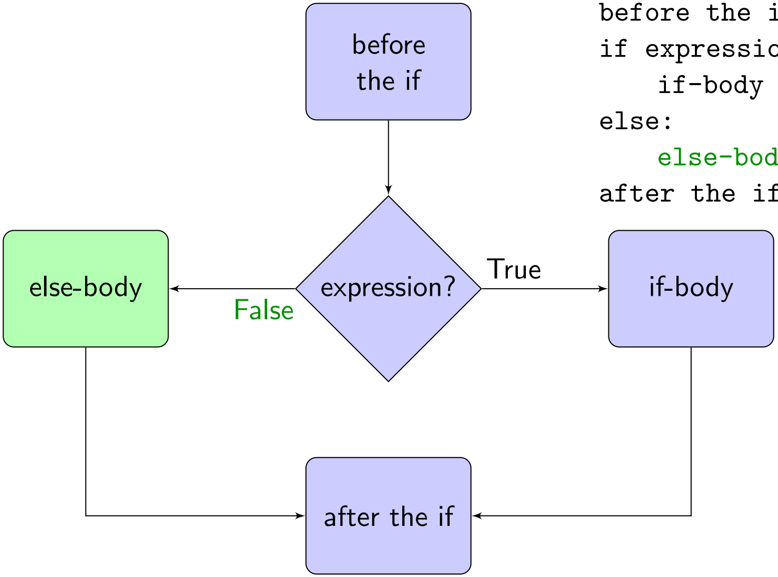

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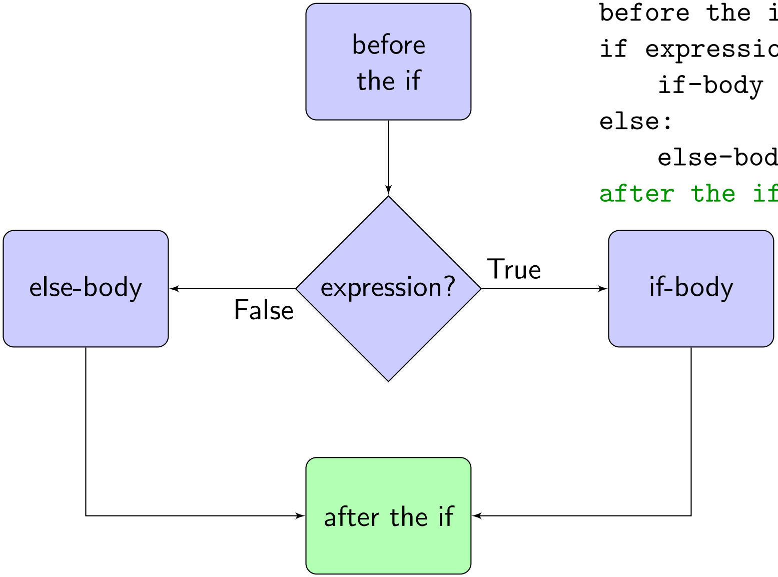

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before the if
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Many alternatives

Sometimes there are more than two alternatives.

- Converting a numeric score into a letter grade:
  - If the score is greater than or equal to 90, print A.
  - Otherwise, if `score >= 80`, print B.
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  - And so on. . .

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- Each body is an indented block.

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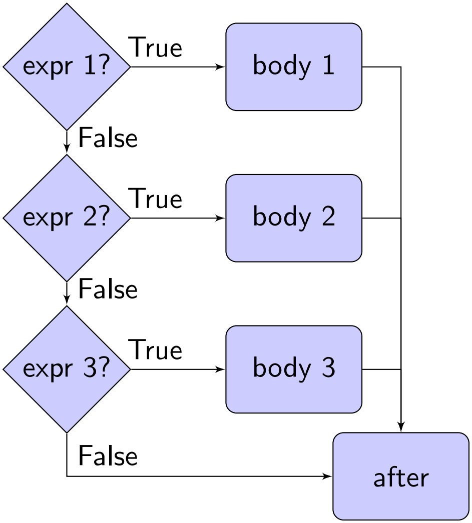

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if expr1:
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elif expr3:
    body3
after
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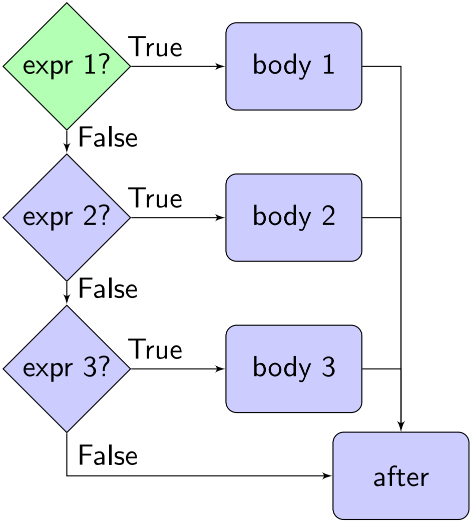
Flowchart for `if-elif`



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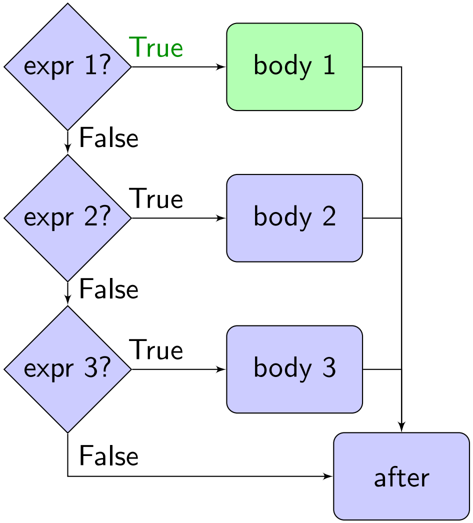

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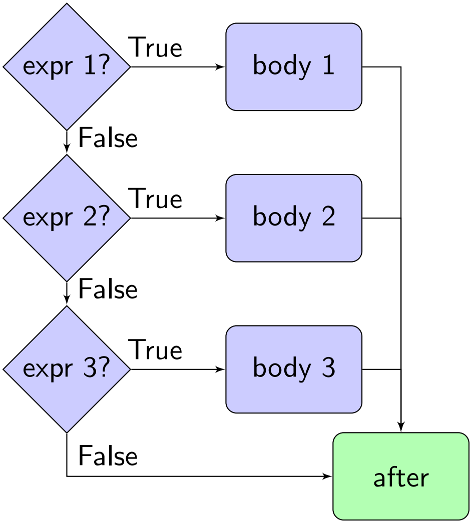

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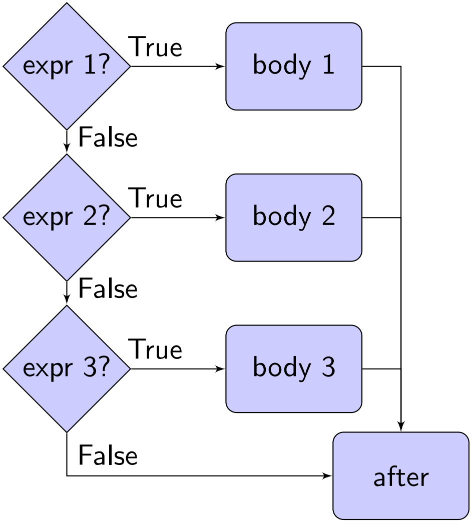

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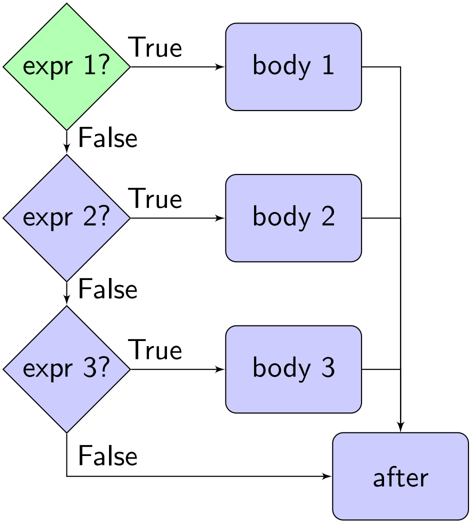

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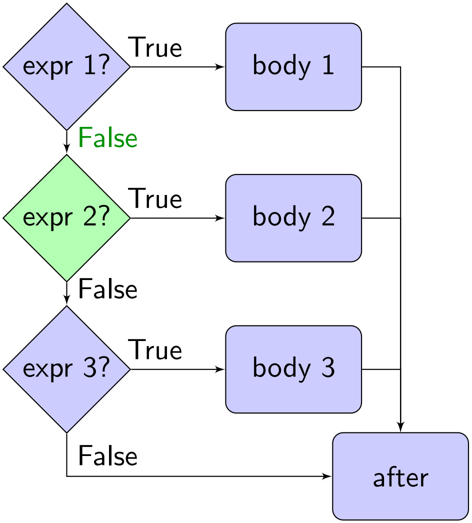

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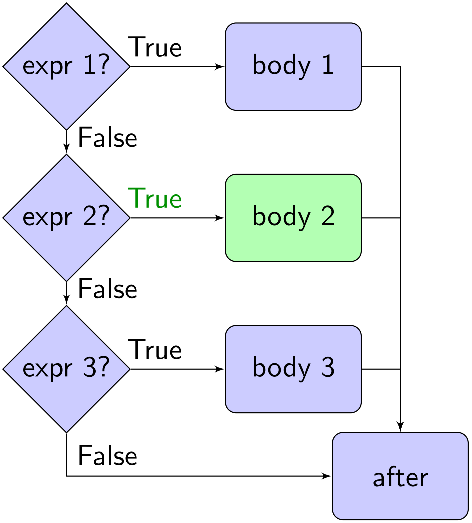

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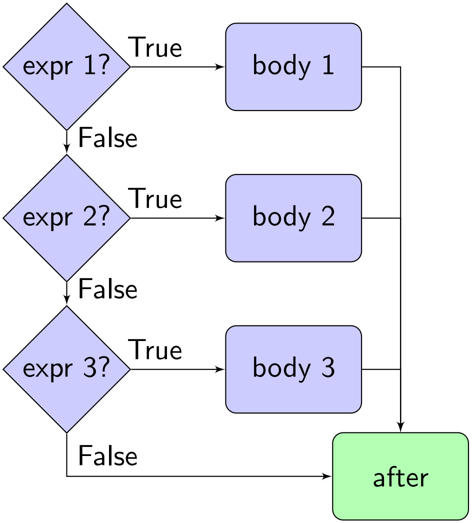

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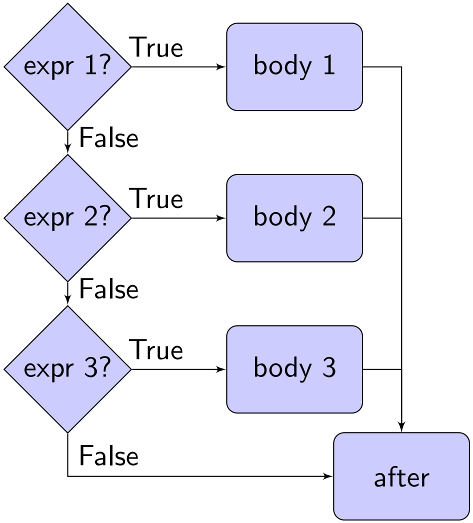

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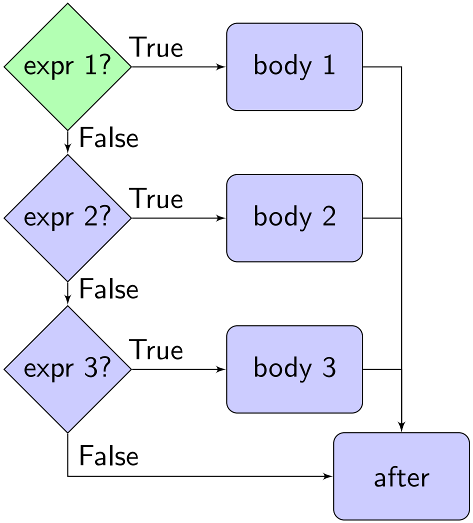

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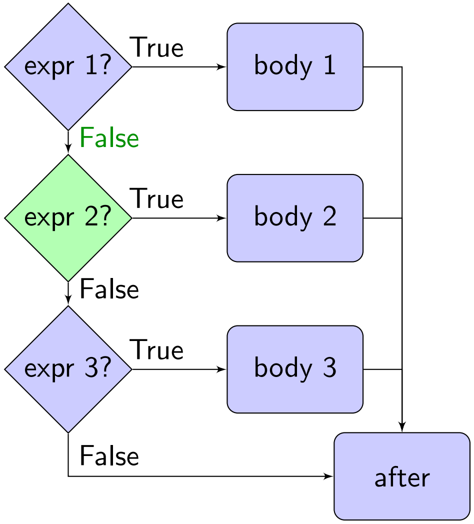

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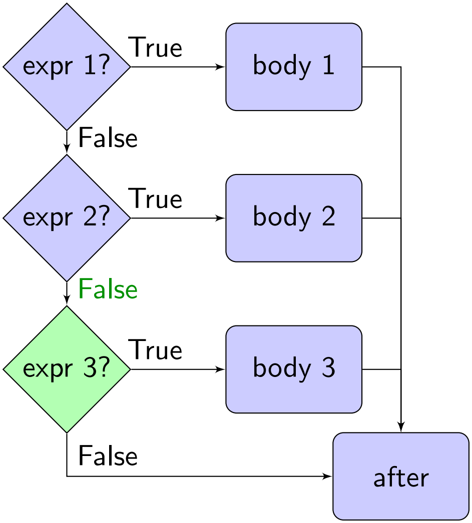

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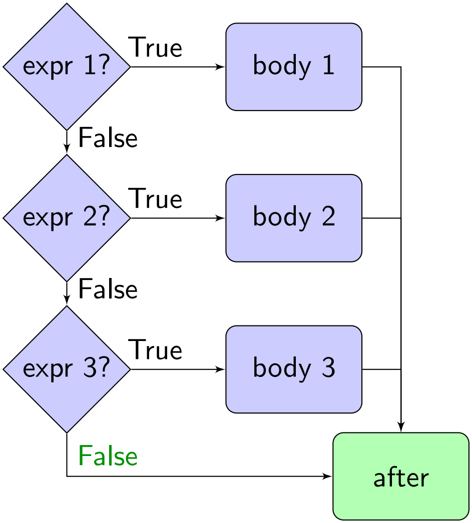

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