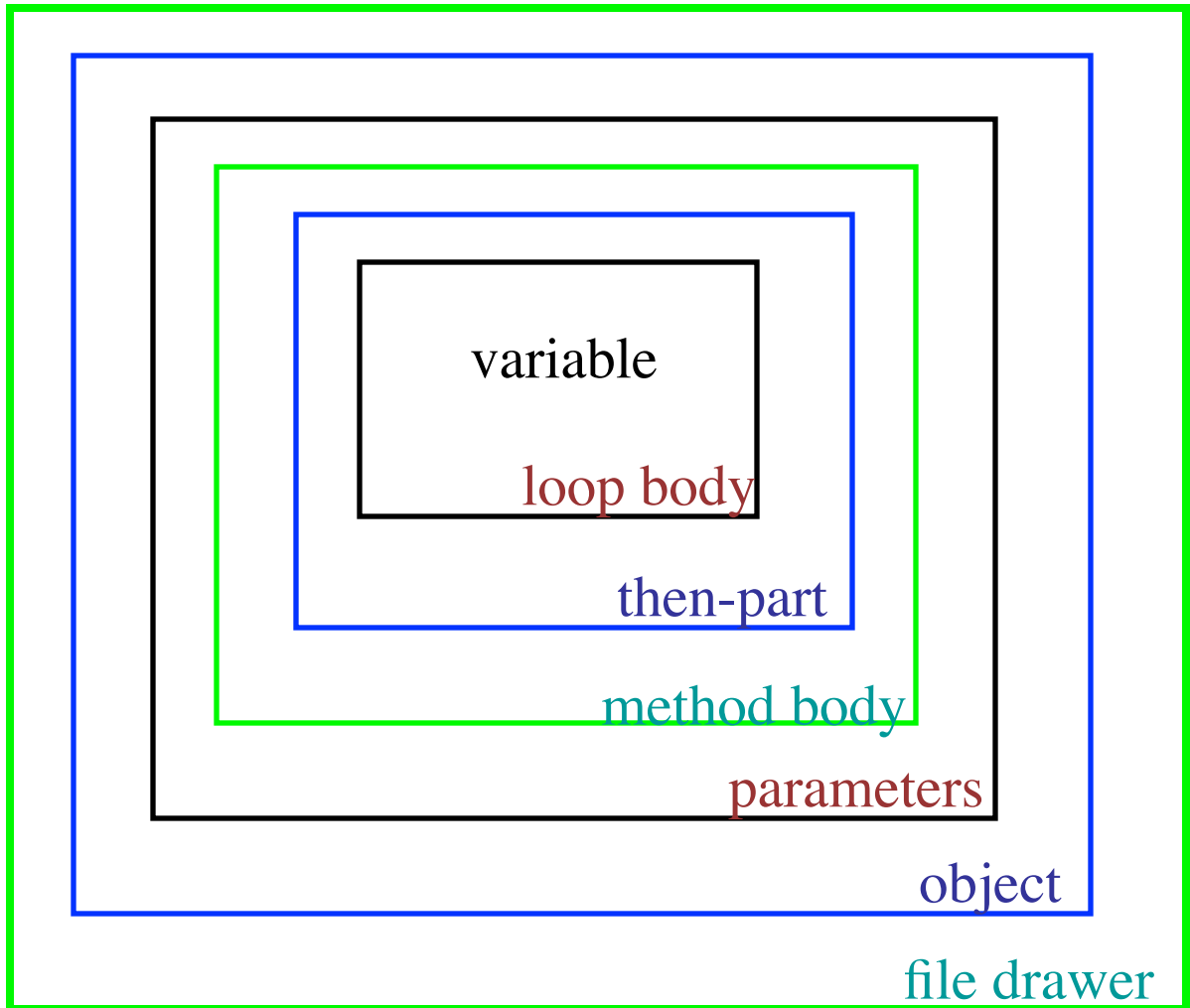# The inside-out rule

Inside-out rule:
To find the declaration corresponding to the use of a variable, look in enclosing scopes, from inside-out, until it is found.

If not found, the use of the variable is illegal and the program won't compile.

Inside-out rule for method calls

a0

| | | | Chapter |
| title | "peace" | prev | null |

number   1   getTitle()   …

toString(String) { … getTitle()… m(number) …}

a1

| | | | Chapter |
| title | "truth" | prev | a0 |

number   2   getTitle()   …

toString(String) { … getTitle()… m(number) …}

| m(**int**) {   …   } | m(**boolean**) { … m(1) …   } |

Inside-out rule:
Search inside-out for a method with the appropriate signature.

When outside the scope …

Chapter file drawer

a0

| title | "peace" | | prev | **null** | | Chapter |

number 1   getTitle()   …

toString(String) { … getTitle()… m(number) …}

m(**int**) {   …   }

m(**boolean**) { … m(1) …   }

C file drawer

a1

n 25   c1 a0   C

p(String) { …   c1.getTitle()   …
            Chapter.m(n) …
          }