



Static methods and variables



CS101J, Cornell 0

The Chapter file drawer



Class Chapter file drawer

```

a0
title "peace" prev null Chapter
number 1 getTitle() ...

a1
title "truth" prev a0 Chapter
number 2 getTitle() ...

```

The Chapter file drawer

```

a0
title "peace" prev null Chapter
number 1 getTitle() ...
isBefore(c) { return number < c.number; }

a1
title "truth" prev a0 Chapter
number 2 getTitle() ...
isBefore(c) { return number < c.number; }

```

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Two functions isBefore

```

a0
title "peace" prev null Chapter
number 1 getTitle() ...
isBefore(c) { return number < c.number; }
isBefore(b, c) { return b.number < c.number; }

a1
title "truth" prev a0 Chapter
number 2 getTitle() ...
isBefore(c) { return number < c.number; }
isBefore(b, c) { return b.number < c.number; }

```

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A static function

```

a0
title "peace" prev null Chapter
number 1 getTitle() ...
isBefore(c) { return number < c.number; }

a1
title "truth" prev a0 Chapter
number 2 getTitle() ...
isBefore(c) { return number < c.number; }

isBefore(b, c) { return b.number < c.number; }

```

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Static functions cannot reference components directly

```

a0
title "peace" prev null Chapter
number 1 getTitle() ...

a1
title "truth" prev a0 Chapter
number 2 getTitle() ...
isBefore(c) { return number < c.number; }
isBefore(b, c) { return b.number < c.number; }

```

illegal reference to number

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Guideline for making a method static

```

a0
title "peace" prev null Chapter
number 1 getTitle() ...
isBefore(c) { return number < c.number; }

a1
title "truth" prev a0 Chapter
number 2 getTitle() ...
isBefore(c) { return number < c.number; }

isBefore(b, c) { return b.number < c.number; }

```

Guideline: Make a method static if it does not refer directly to a component of the class.
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The class variable

```

a0
title "peace" prev null Chapter
number 1 getTitle() ...
isBefore(c) { return number < c.number; }

a1
title "truth" prev a0 Chapter
number 2 getTitle() ...
isBefore(c) { return number < c.number; }

numberOfChaps 2
isBefore(b, c) { return b.number < c.number; }

```

Guideline: Make a field static when it is used to communicate info about all objects of the class.
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