



WRITE LESS.
DO MORE.

WHO ARE WE?

YEHUDA KATZ
ANDY DELCAMBRE



HOW IS THIS GOING TO
WORK?

INTRODUCTION TO JQUERY

EVENT DRIVEN
JAVASCRIPT

LABS!

LABS!

```
git clone git://github.com/adelcambre/jquery-tutorial.git
```

INTRODUCTION TO JQUERY

```
h1 {  
  color: #999;  
}
```

UJS WITH JQUERY

```
$(“h1”).click(function() {  
  $(this).fadeIn();  
});
```

GET SOME ELEMENTS.
BUT HOW?

CSS 3 PLUS

- `div`
- `div#foo`
- `div.class`
- `div, p, a`
- `div p`
- `div > p`
- `div + p`
- `div ~ p`
- `div:first`
- `div:last`
- `div:not(#foo)`
- `div:even`
- `div:odd`
- `div:eq(1)`
- `div:gt(1)`
- `div:lt(1)`
- `div:header`
- `div:animated`
- `div:contains(txt)`
- `div:empty`
- `div:has(p)`
- `div:parent`
- `div:hidden`
- `div:visible`

CSS 3 PLUS

- `div[foo]`
- `div[foo=bar]`
- `div[foo!=bar]`
- `div[foo^=bar]`
- `div[foo$=bar]`
- `div[foo*=bar]`
- `:nth-child(2)`
- `:nth-child(even)`
- `:first-child`
- `:last-child`
- `:only-child`
- `:input`
- `:text`
- `:password`
- `:radio`
- `:checkbox`
- `:submit`
- `:image`
- `:reset`
- `:button`
- `:file`
- `:hidden`
- `:enabled`
- `:disabled`
- `:checked`
- `:selected`

GET SOME ELEMENTS.

```
$("table tr:nth-  
child(even) > td:visible")
```


DO STUFF.

`$("div")`

RETURNS JQUERY OBJECT

```
$("div").fadeIn()
```

RETURNS JQUERY OBJECT

```
$("div").fadeIn()  
.css("color", "green")
```

RETURNS JQUERY OBJECT

WE CALL THIS CHAINING

CRAZY CHAINS

```
$(“ul.open”) // [ ul, ul, ul ]  
  .children(“li”) // [ li, li, li ]  
    .addClass(“open”) // [ li, li, li ]  
  .end() // [ ul, ul, ul ]  
  .find(“a”) // [ a, a, a ]  
    .click(function(){  
      $(this).next().toggle();  
      return false;  
    }) // [ a, a, a ]  
  .end(); // [ ul, ul, ul ]
```

LAB 1: SELECTORS

- Select every other row of the table
- Select the Checked checkboxes
- Select the first column of the table
- Select the top level of the outline
- Select any links to jquery.com
- Select any images that contain flowers

5 PARTS OF JQUERY

DOM

EVENTS

EFFECTS

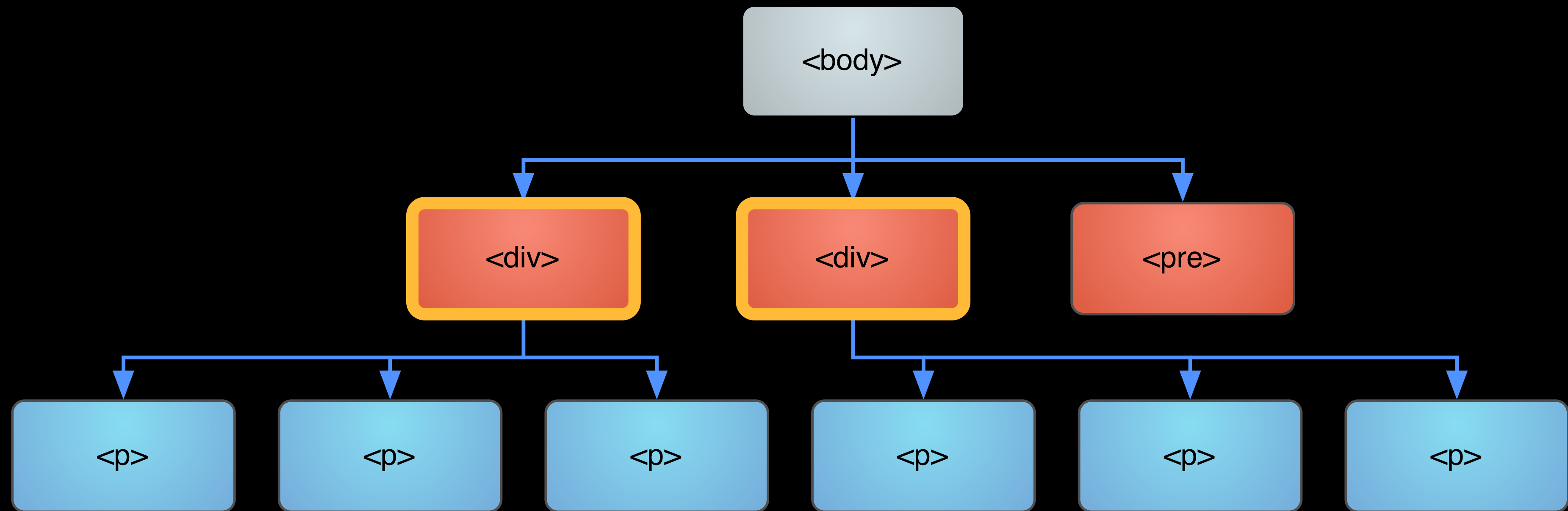
AJAX

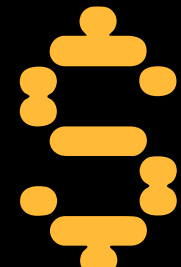
PLUGINS

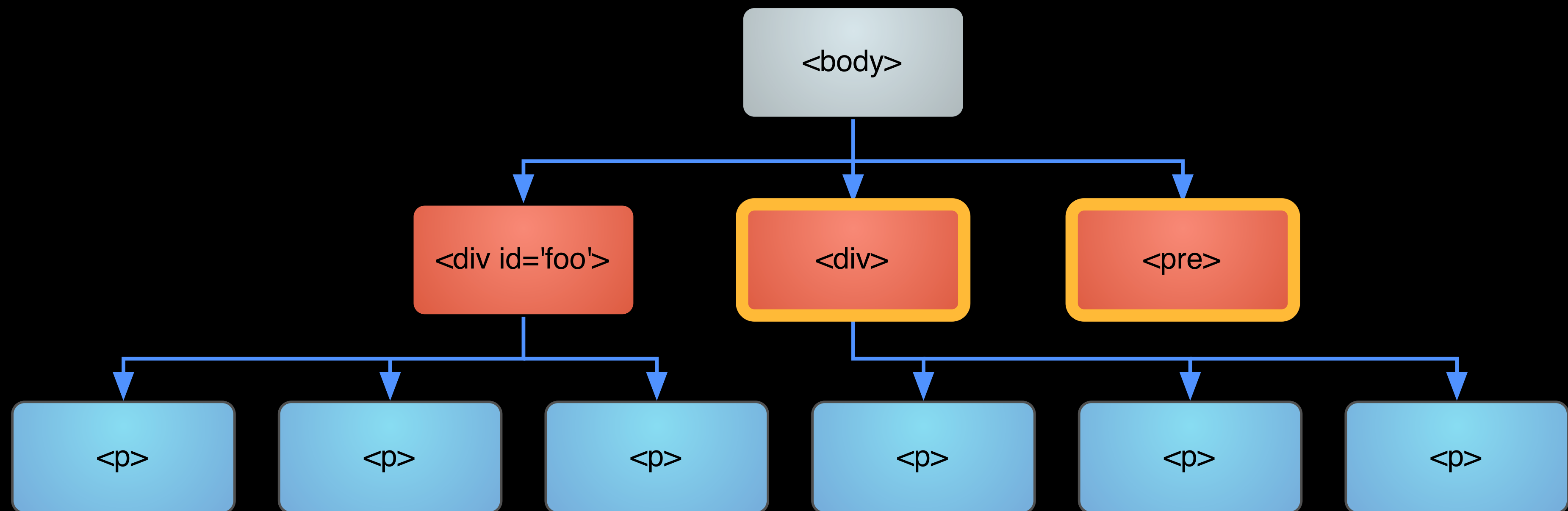
DOM TRAVERSAL

```
$(“div”).parent();  
$(“div”).siblings();  
$(“div”).next();  
$(“div”).nextAll(“p”);  
$(“div”).nextAll(“p:first”);
```

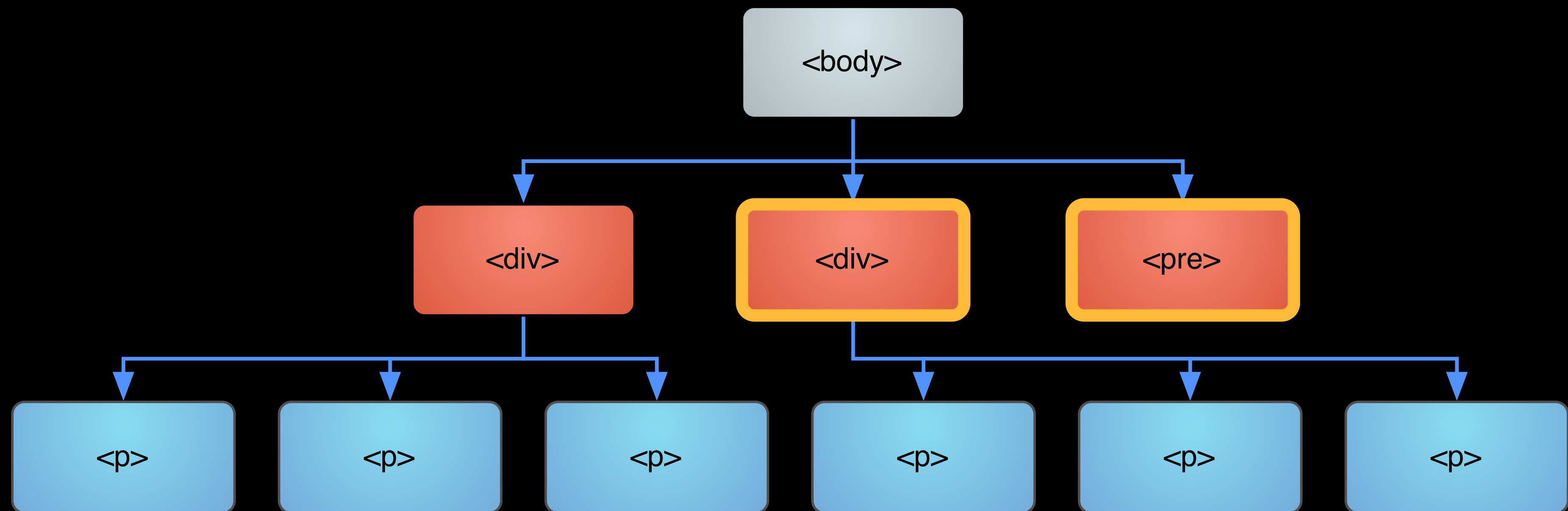
\$cript<div>



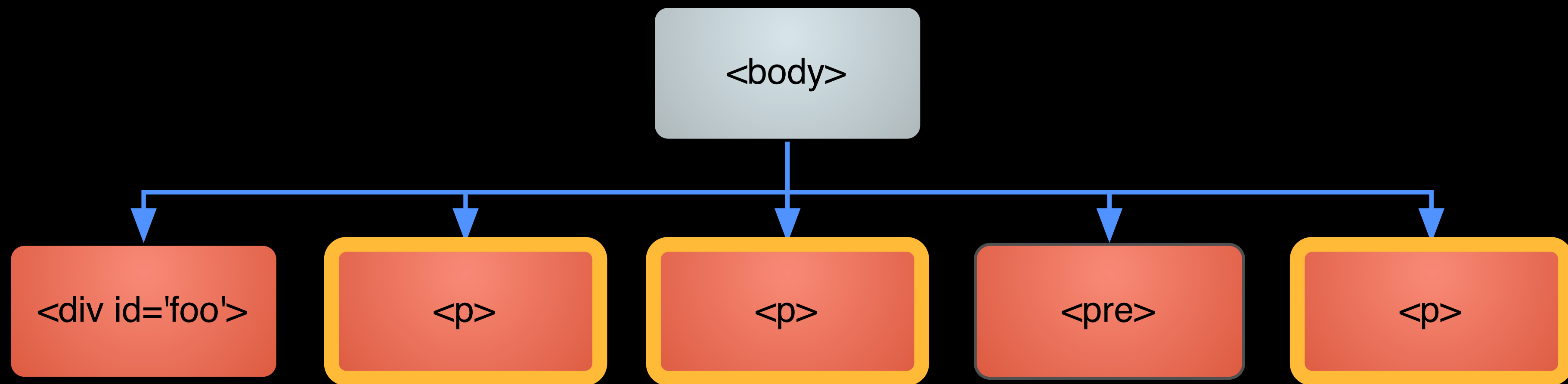
 `("DIV#FOO").SIBLINGS()`



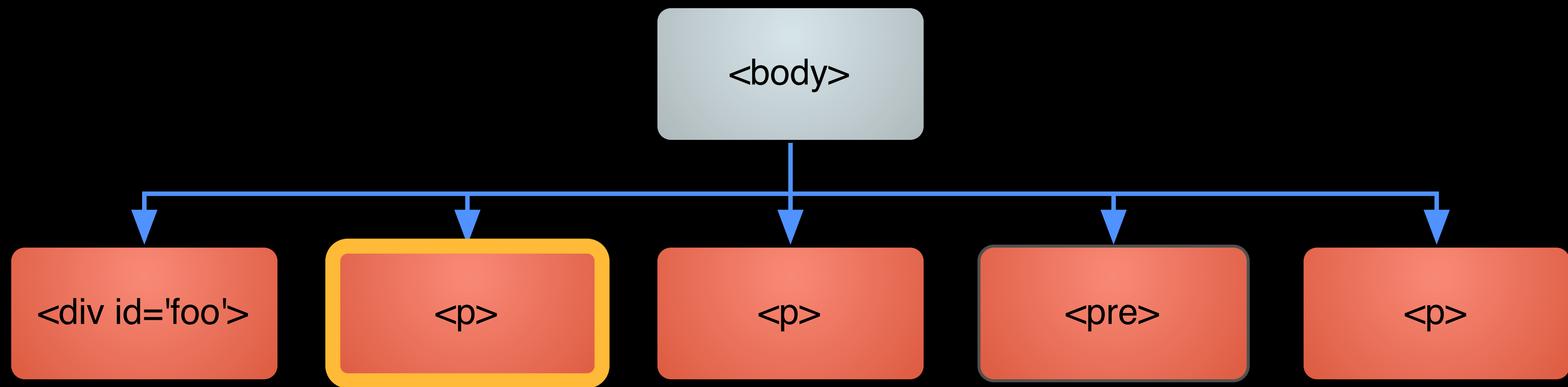
\$("div").next()



`$("div").nextAll("p")`



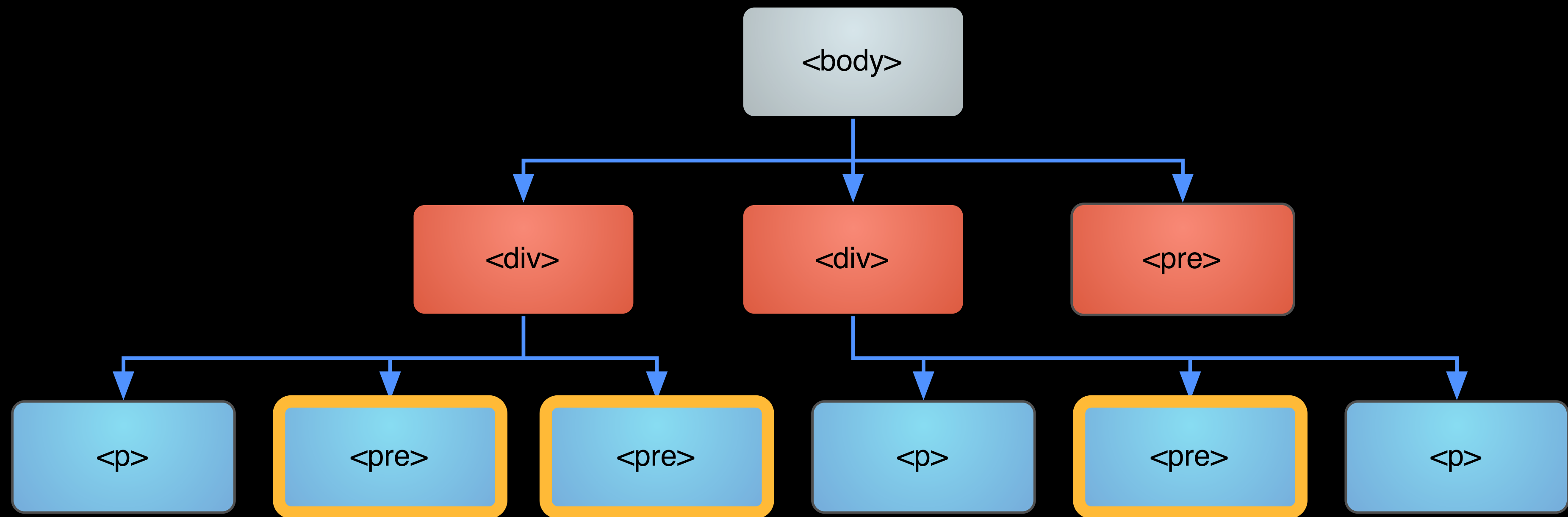
`$("div").nextAll("p:first")`



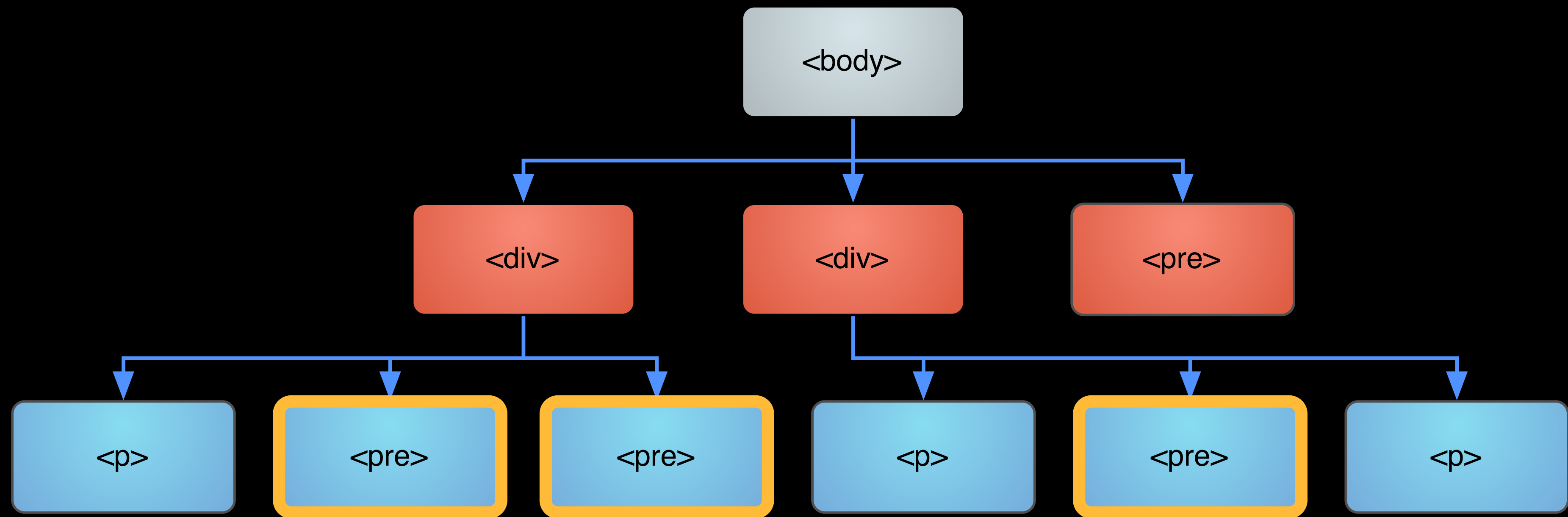
FIND

```
$(“div pre”)  
$(“div”).find(“pre”)
```

\$("DIV PRE")



\$("div").find("pre")



FILTER

```
$(“div:contains(some text)”)
$(“div”).filter(“:contains(some text)”)

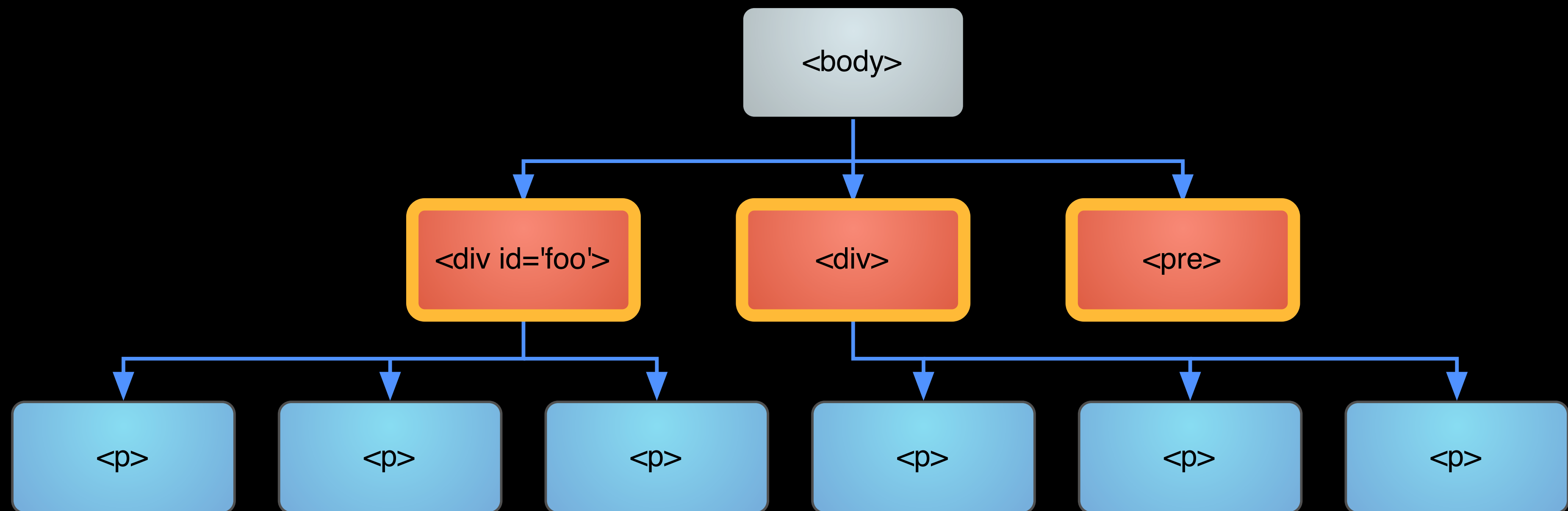
$(“div”).filter(function() {
    return $(this).text().match(“some text”)
})
```

ANDSELF()

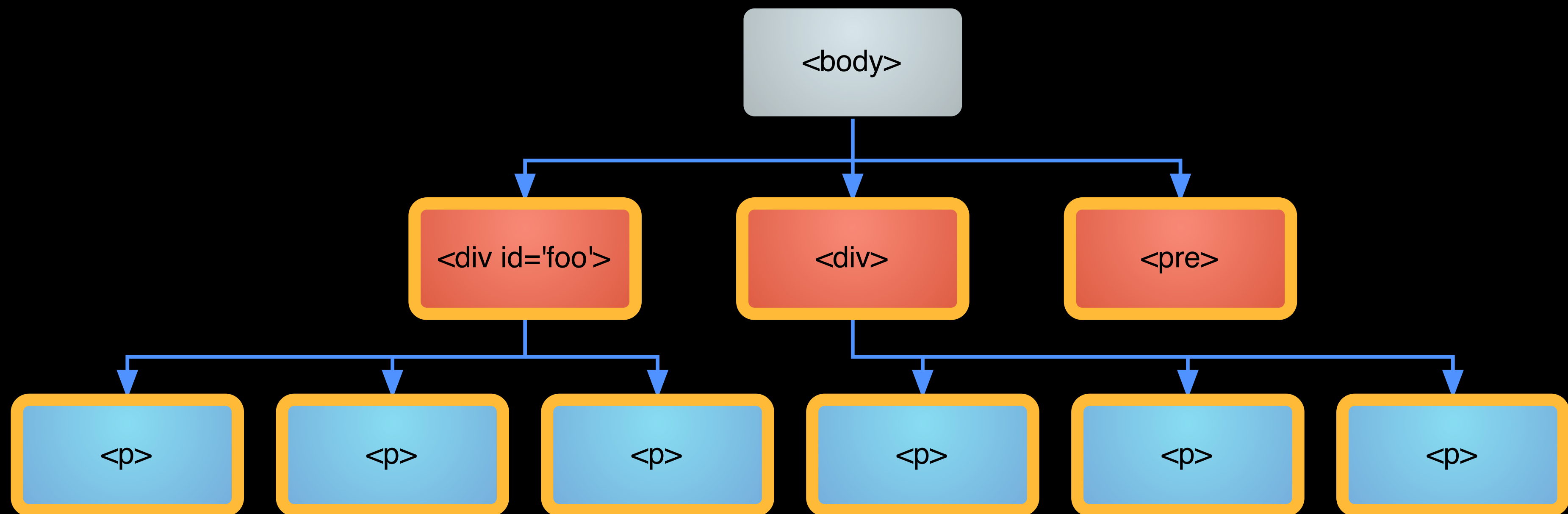
```
$(“div”).siblings().andSelf()
```

```
$(“div”).parent().andSelf()
```

`$("div").siblings().andSelf()`



\$("P").PARENT().ANDSELF()



LAB 2: TRAVERSAL

- Select any text areas and their labels
- Any span's parent
- All of the form elements from a form that PUT's

ATTRIBUTES

```
$(“div”).attr(“id”) // returns id  
$(“div”).attr(“id”, “hello”) // sets id to hello  
$(“div”).attr(“id”, function() { return this.name })  
$(“div”).attr({id: “foo”, name: “bar”})  
$(“div”).removeAttr(“id”);
```

CLASSES

```
$(“div”).addClass(“foo”)
```

```
$(“div”).removeClass(“foo”)
```

```
$(“div”).toggleClass(“foo”)
```

```
$(“div”).hasClass(“foo”)
```


OTHER

```
$(“div”).html()
```

```
$(“div”).html(“<p>Hello</p>”)
```

```
$(“div”).text()
```

```
$(“div”).text(“Hello”)
```

```
$(“div”).val()
```

```
$(“div”).val(“Hello”)
```

NOTICING A PATTERN?

MANIPULATION

```
$(“div”).append(“<p>Hello</p>”)
```

```
$(“<p>Hello</p>”).appendTo(“div”)
```

```
$(“div”).after(“<p>Hello</p>”)
```

```
$(“<p>Hello</p>”).insertAfter(“div”)
```

WAY MORE...

[HTTP://DOCS.JQUERY.COM](http://docs.jquery.com)

[HTTP://API.JQUERY.COM](http://api.jquery.com)

LAB 3: MANIPULATION

Note: Use the Lab 2 File again

- Add CSS4 to the list after CSS3
- Remove any images with Dogs
- Turn the ruby row red
- Add some default text to the input field

5 PARTS OF JQUERY

DOM

EVENTS

EFFECTS

AJAX

PLUGINS

DOCUMENT READY

```
$(document).ready(function() { ... })
```

```
Alias: jQuery(function($){ ... })
```

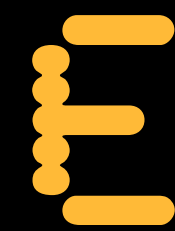
BIND

```
$(“div”).bind(“click”, function() { ... })
```

Alias: `$(“div”).click(function() { ... })`

“THIS”

REFERS TO THE ELEMENT BOUND



```
$(“div”).click(function(e) { ... })
```

CORRECTED EVENT OBJECT

Property	Correction
target	The element that triggered the event (event delegation)
relatedTarget	The element that the mouse is moving in (or out) of
pageX/Y	The mouse cursor relative to the document
which	mouse: 1 (left) 2 (middle) 3 (right)
	keypress: The ASCII value of the text input
metaKey	Control on Windows and Apple on OSX

TRIGGER

```
$("div").trigger("click")
```

Alias: `$("div").click()`

TRIGGERHANDLER

DOESN'T TRIGGER THE BROWSER'S DEFAULT ACTIONS

CUSTOM EVENTS

```
$(“div”).bind(“myEvent”, function() { ... })  
    $(“div”).trigger(“myEvent”)
```

HOVER

```
$(“div”).hover(function() { ... }, function() { ... })
```

TOGGLE

```
$(“div”).toggle(function() { ... }, function() { ... })
```




LIVE

```
$(“div”).live(“click”, function() { ... })
```

5 PARTS OF JQUERY

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FADES

```
$(“div”).fadeIn()  
$(“div”).fadeOut(“slow”)
```

SLIDES

```
$(“div”).slideUp(200)
```

```
$(“div”).slideDown(“slow”)
```

ANIMATE

```
$(“div”).animate({height: “toggle”, opacity: “toggle”})
```

```
$(“div”).animate({fontSize: “24px”, opacity: 0.5}, {easing: “expo”})
```

LAB 4: EVENTS AND EFFECTS

Note: Use the Lab 2 File again

- Fade out all of the divs
- Make each img grow when you mouseover them (and shrink again after you leave)
- Make clicking an li collapse the sub list

5 PARTS OF JQUERY

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MAKE EASY THINGS EASY

```
$(“div”).load(“some_url”);  
$(“div”).load(“some_url”, {data: “foo”},  
    function(text) { ... });
```


IT'S EASY TO DO IT RIGHT

```
$.getJSON("some_url", function(json) { ... })
```

```
$.getJSON("some_url", {data: "foo"},  
  function(json) { ... })
```

IT'S CONSISTENT

```
$.get("some_url", function(text) { ... })  
$.post("some_url", {data: "foo"},  
      function(text) { ... })
```

AND POWERFUL

\$.AJAX OPTIONS

- ASYNC
- BEFORESEND
- CACHE
- COMPLETE
- CONTENTTYPE
- DATA
- DATATYPE
- ERROR
- GLOBAL
- IFMODIFIED
- JSONP
- PROCESSDATA
- SUCCESS
- TIMEOUT
- TYPE

AND POWERFUL

GLOBAL AJAX SETTINGS

```
/* No Ajax requests exist, and one starts */
$("div.progress").ajaxStart(function() { $(this).show() });

/* The last Ajax request stops */
$("div.progress").ajaxStop(function() { $(this).hide() });

/* Any Ajax request is sent */
$("p").ajaxSend(function() { ... });

/* Any Ajax request completes (success or failure) */
$("div").ajaxComplete(function() { ... });

/* Any Ajax request errors out */
$("div").ajaxError(function() { ... });

/* Any Ajax request succeeds */
$("div").ajaxSuccess(function() { ... });
```

5 PARTS OF JQUERY

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THERE ARE HUNDREDS

WHICH ARE IMPORTANT?

JQUERY UI

- Draggables
- Droppables
- Sortables
- Selectables
- Resizables

Primitives



- Accordion
- Date Picker
- Dialog
- Slider
- Tabs

Widgets



JQUERY FORMS

AJAXIFY A FORM IN ONE EASY STEP:

```
$("#FORM.REMOTE").AJAXFORMO
```

[HTTP://WWW.MALSUP.COM/JQUERY/FORM/](http://www.malsup.com/jquery/form/)

FORM VALIDATION

SPECIFY VALIDATION RULES IN YOUR MARKUP

[HTTP://ASSISTANCE.DE/JQUERY-
PLUGINS/JQUERY-PLUGIN-VALIDATION/](http://assistance.de/jquery-plugins/jquery-plugin-validation/)



BASE

METADATA PLUGIN

SPECIFY METADATA FOR ELEMENTS IN MARKUP

```
<DIV DATA="{SOME: 'DATA'}">
```

```
$("DIV").METADATA().SOME // RETURNS 'DATA'
```

[HTTP://JQUERY.IS.GOOGLECODE.COM/SUN/
TRUNK/PLUGINS/METADATA/](http://jquery.is.googlecode.com/sun/trunk/plugins/metadata/)

EVENT DRIVEN
JAVASCRIPT

[http://github.com/
wycats/blue-ridge](http://github.com/wycats/blue-ridge)

JQUERY ON RAILS

JQUERY AND RJS

RAILS 3

AJAX AND RAILS

```
$.getJSON("/rails/action")
```

AJAX AND RAILS

```
respond_to do |format|  
  format.json {  
    render :json => obj  
  }  
end
```

LINK TO REMOTE

```
link_to_remote "Delete this post",  
  :update => "posts",  
  :url => { :action => "destroy",  
            :id => post.id }
```

LINK_TO_REMOTE

```
link_to "Delete this post",  
  url(:action => "destroy",  
      :id => post.id),  
  :rel => "#posts"
```

LINK_TO_REMOTE

```
$( 'a.remote' ).live( "click", function() {  
    $( this.rel ).load( this.href )  
});
```

FORM_REMOTE_TAG

```
<% form_remote_tag :url => ...,  
  :update => "res" do -%>
```

```
<% form_tag :url => ...,  
  :rel => "#res" do -%>
```

FORM_REMOTE_TAG

```
$( 'form' ).each(function() {  
    $(this).ajaxForm({ target: this.rel })  
})
```

OBSERVE_FIELD

```
<%=
observe_field :suggest,
  :url => {
    :action => :find },
  :frequency => 0.25,
  :update => :suggest,
  :with => 'q'
%>

var lastTime = new Date
$('#suggest')
  .live("keyup", function() {
    if(new Date - lastTime > 250) {
      var field = $('#suggest');
      var url = field.attr('rel');
      field.load(url,
        {q: field.val()});
    }
    lastTime = new Date;
  });
```


PERIODICALLY_CALL_REMOTE

```
periodically_call_remote(  
  :url => {  
    :action => 'avgs' },  
  :update => 'avg',  
  :frequency => '20')
```

```
setInterval(function() {  
  $('#avg')  
    .load('/some/avgs');  
}, 20000);
```