In [1]:
```
import ipywidgets as W
L = W.Layout
if __name__ == "__main__":
  mod_name = "ameno"
else:
  mod_name = __name__
print(mod_name ,"tested with ipywidgets (7, 6, 5, 'final', 0), current version ipyw
```

```
ameno tested with ipywidgets (7, 6, 5, 'final', 0), current version ipywidgets is:
(7, 6, 5, 'final', 0)
```

Adding style children to boxes affect the jupyter notebook markdown boxes. For exmample if h1 is given a color of blue, then the contents of the h1 tags in the markdown boxes turn blue. To avoid this we must first define a style class with a unique name and then specifically apply that. Well the good news, if we want to, we may style the markdown boxes in the notebook.

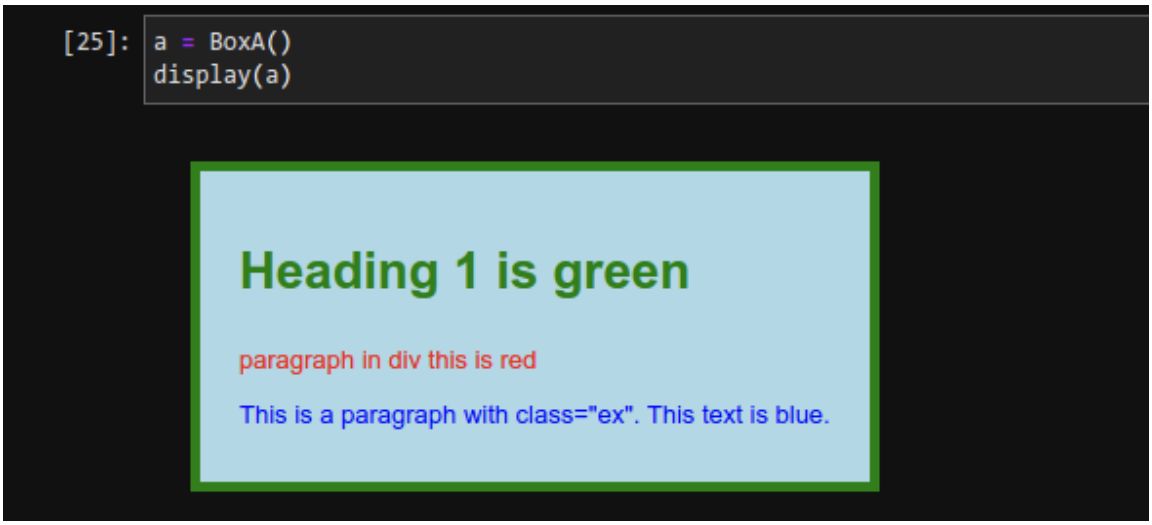
In [ ]:
```
```

Within Box, within a single HTML child widget, create a css style class and use it:

In [2]:
```
class BoxA(W.Box):
  def __init__(self ,*args):
    super().__init__(*args)
    self.contents = W.HTML('''
    <style>
      div.box_class_21 {
        background-color: lightblue;
        color:red;
        border: 5px solid green;
        margin: 20px;
        padding: 20px;
      }

      h1 {
        color: green;
      }

      p.ex {
        color: blue;
      }
    </style>
        <div class=box_class_21>
           <h1>Heading 1 is green</h1>
           <p>paragraph in div this is red</p>
           <p class="ex">This is a paragraph with class="ex". This text is blue.</p
        </div>
    ''')
    self.children = [self.contents]
```

In [3]:
```
a = BoxA()
display(a)
```

```
BoxA(children=(HTML(value='\n    <style>\n      div.box_class_21 {\n        backgrou
nd-color: lightblue;\n    …
```



Note in the following markdown box, our h1 tags are now green.

I am an h1 and I am now green!

This affects all h1 tags in all the notebook, not just the ones after the styling is added for h1.

In [ ]:

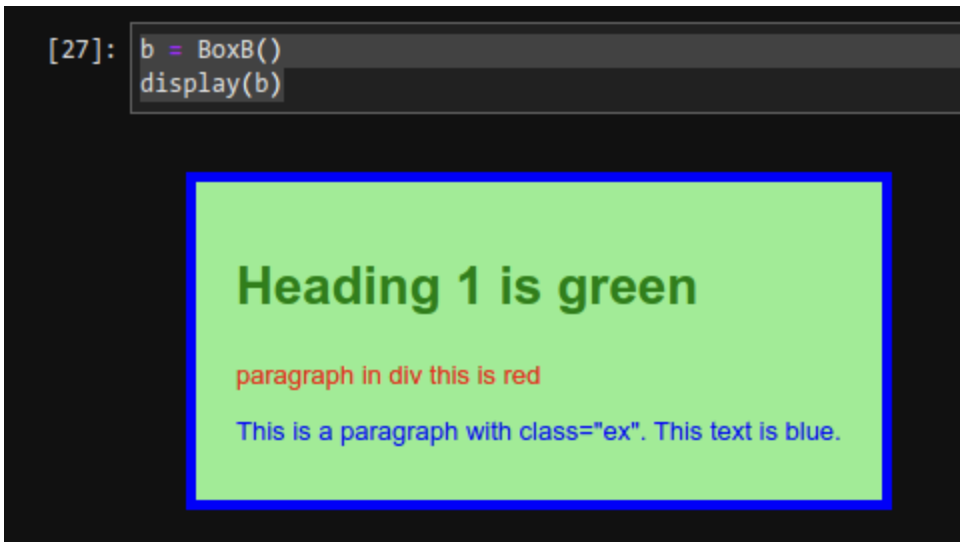
The following example differs from above because the box has two children. The first one defines the style class, while the second one uses it. This works.

In [4]:
```
class BoxB(W.Box):
  def __init__(self ,*args):
    super().__init__(*args)
    self.style = W.HTML('''
    <style>
      div.box_class_22 {
        background-color: lightgreen;
        color:red;
        border: 5px solid blue;
        margin: 20px;
        padding: 20px;
      }

      h1 {
        color: green;
      }

      p.ex {
        color: blue;
      }
    </style>
    ''')
```

```
    self.contents = W.HTML('''
        <div class=box_class_22>
           <h1>Heading 1 is green</h1>
           <p>paragraph in div this is red</p>
           <p class="ex">This is a paragraph with class="ex". This text is blue.</p
        </div>
    ''')
    self.children = [self.style ,self.contents]
```

In [5]:
```
b = BoxB()
display(b)
```

```
BoxB(children=(HTML(value='\n    <style>\n    div.box_class_22 {\n        backgrou
nd-color: lightgreen;\n   …
```



This example uses the style classes defined in the prior two examples. They are stil available. So apparntly we may have a dedicated widget with the sole purpose of defining classes, and then later other widgets may use them.

In [6]:
```
class BoxC(W.Box):
  def __init__(self ,*args):
    super().__init__(*args)

    self.contents1 = W.HTML('''
        <div class=box_class_21>
           <h1>Heading 1 is green</h1>
           <p>paragraph in div this is red</p>
           <p class="ex">This is a paragraph with class="ex". This text is blue.</p
        </div>
    ''')
    self.contents2 = W.HTML('''
        <div class=box_class_22>
           <h1>Heading 1 is green</h1>
           <p>paragraph in div this is red</p>
           <p class="ex">This is a paragraph with class="ex". This text is blue.</p
        </div>
```

```
    ''')
    self.children = [self.contents1 ,self.contents2]
```

In [7]:
```
c = BoxC()
display(c)
```

```
BoxC(children=(HTML(value='\n        <div class=box_class_21>\n            <h1>Headin
g 1 is green</h1> \n      …
```

Here we use three separate children, where the first opens a div, the second provides the contents for the div, and the third closes the div. This does not work.

In [8]:
```
class BoxD(W.Box):
  def __init__(self ,*args):
    super().__init__(*args)

    self.div_open = W.HTML("<div class=box_class_21")
    self.div_contents =  W.HTML('''
           <h1>Heading 1 is green</h1>
           <p>paragraph in div this is red</p>
           <p class="ex">This is a paragraph with class="ex". This text is blue.</p
    ''')
    self.div_close = W.HTML("</div>")
    self.children = [self.div_open ,self.div_contents ,self.div_close]
```

In [9]:
```
d = BoxD()
display(d)
```

```
BoxD(children=(HTML(value='<div class=box_class_21'), HTML(value='\n            <h1>H
eading 1 is green</h1> \n …
```

In [ ]: