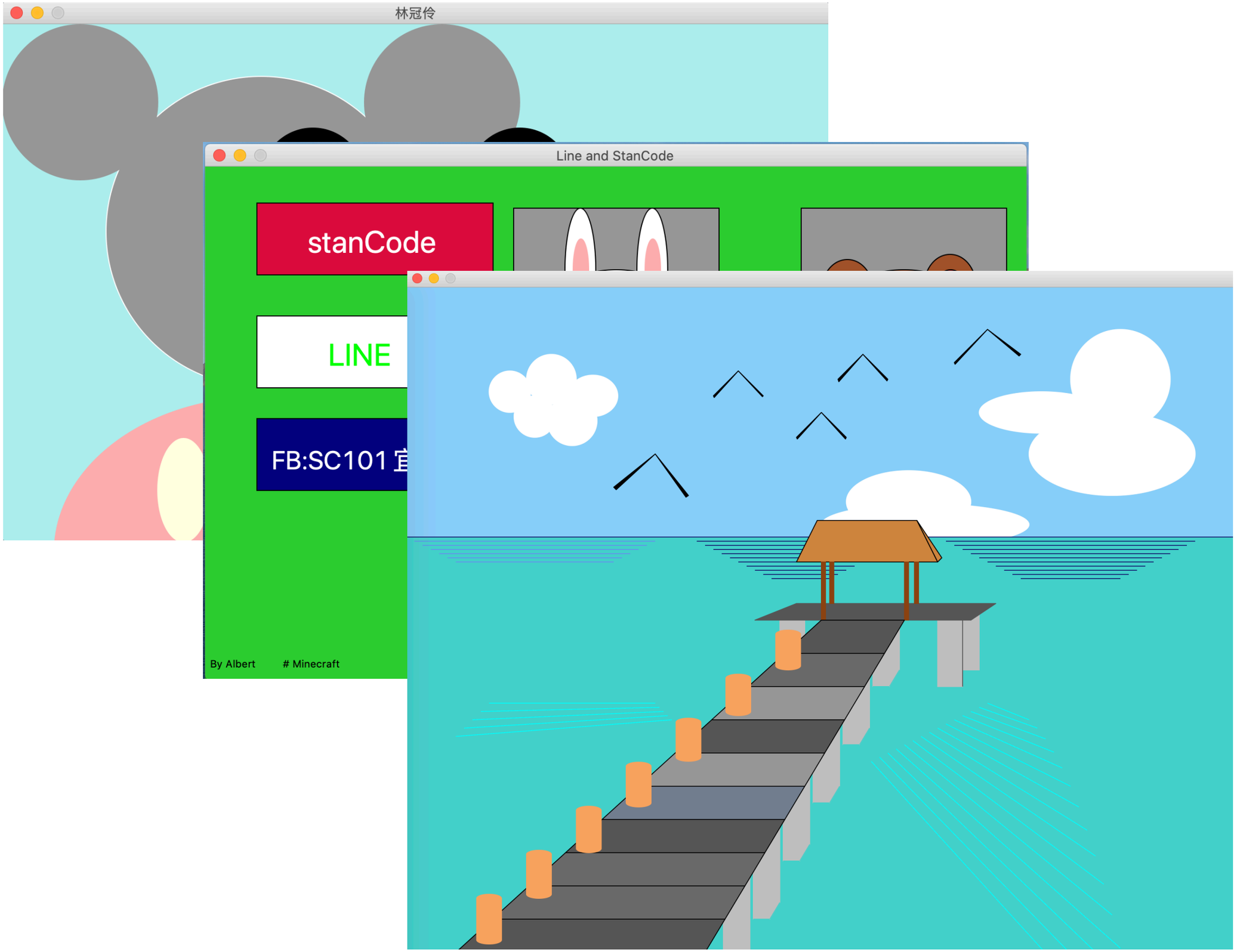
SC101

Lecture 1


林冠伶
Line and StanCode
stanCode
LINE
FB:SC101 宣
By Albert
Minecraft

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from campy.graphics.gobjects import GOval, GRect
from campy.graphics.gwindow import GWindow


def main():
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    face = GOval(200, 250, x=350, y=200)
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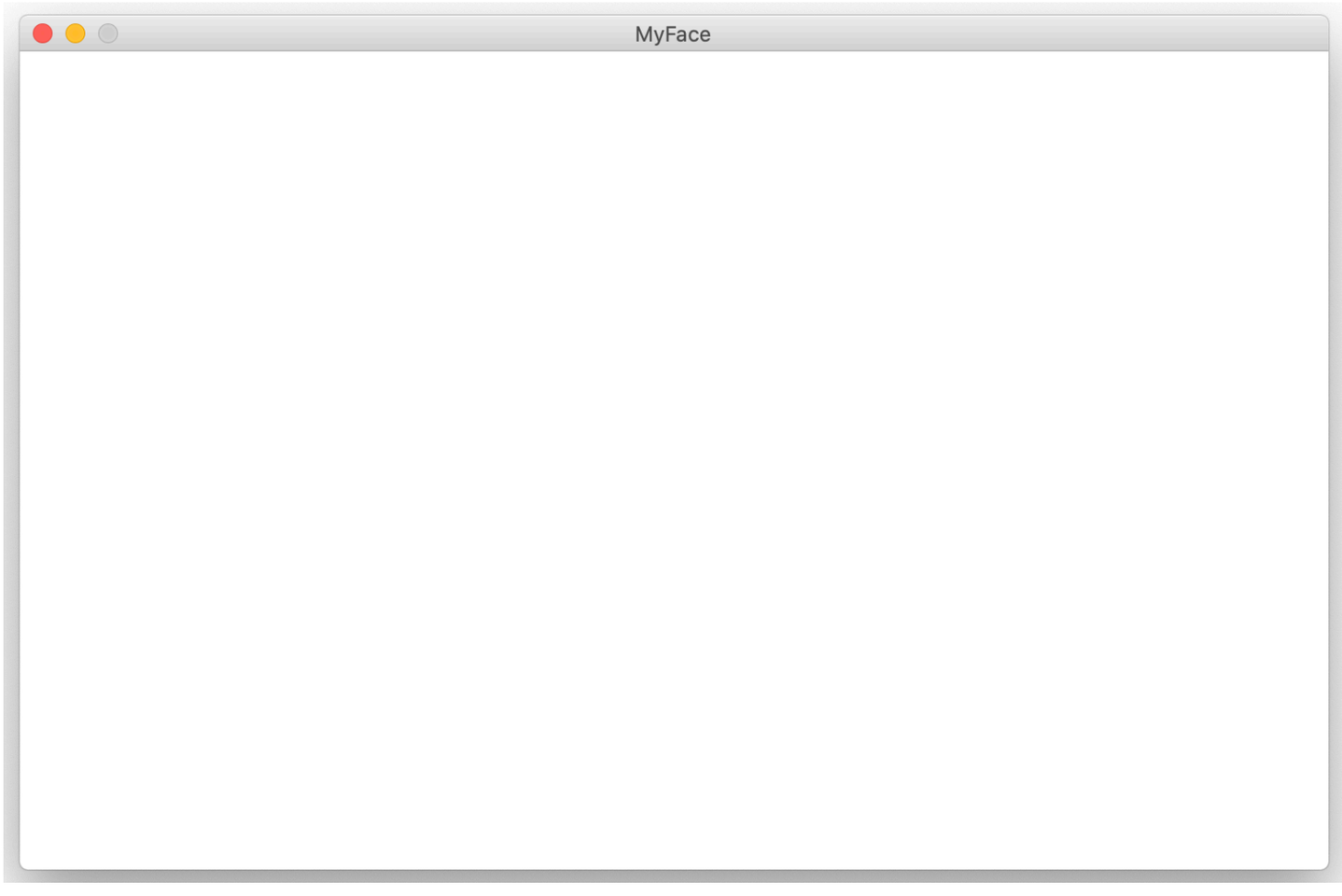

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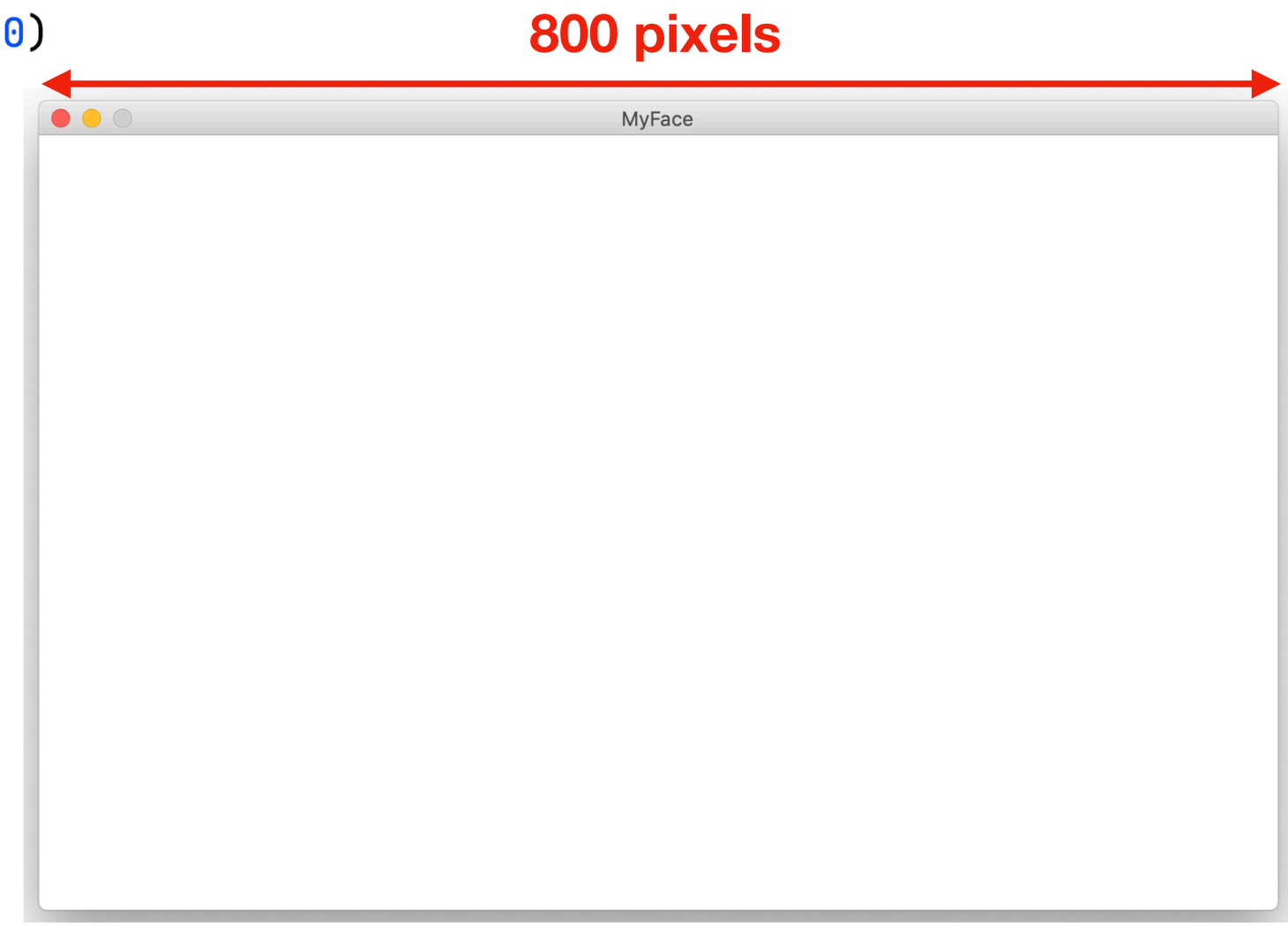

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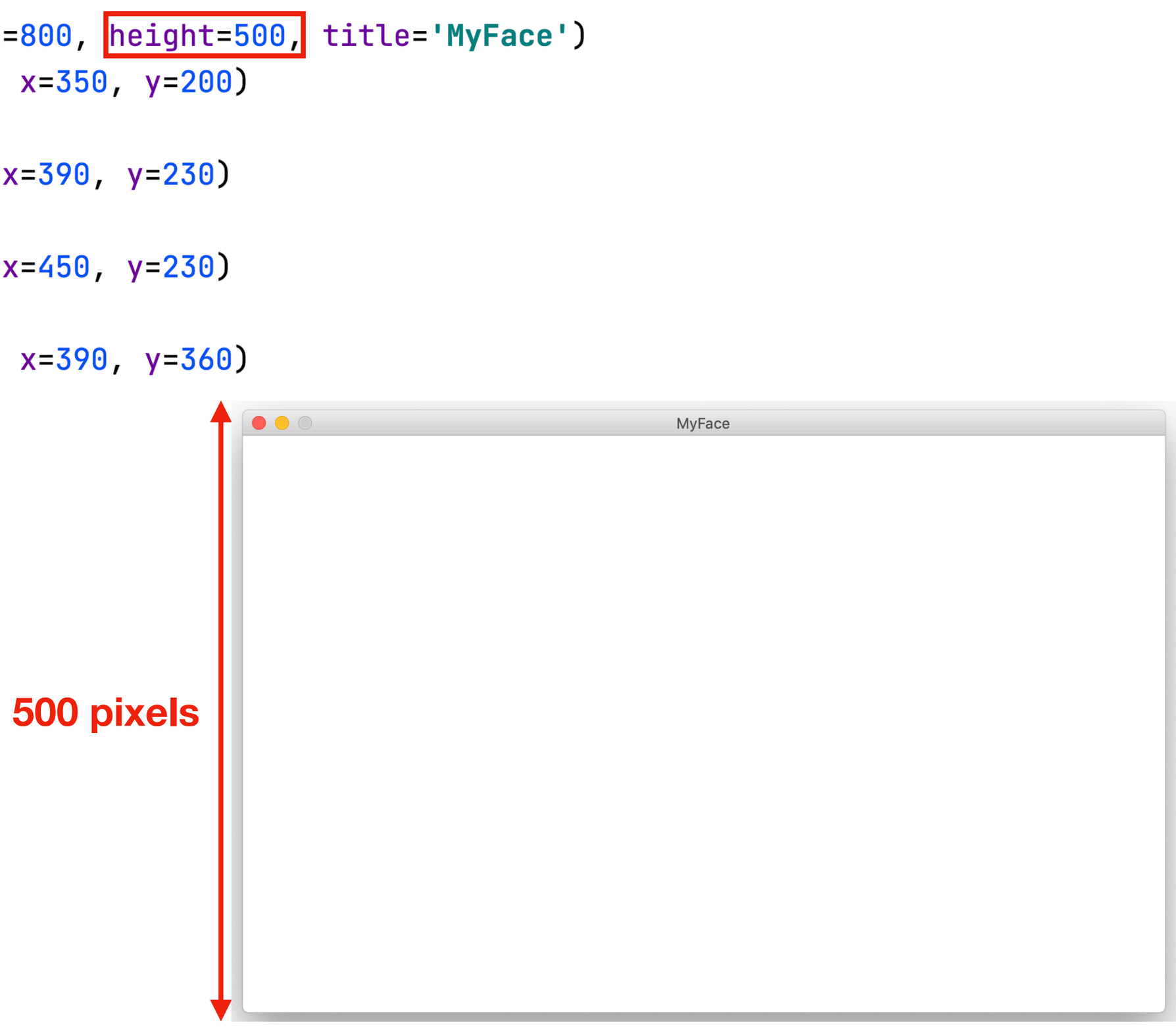

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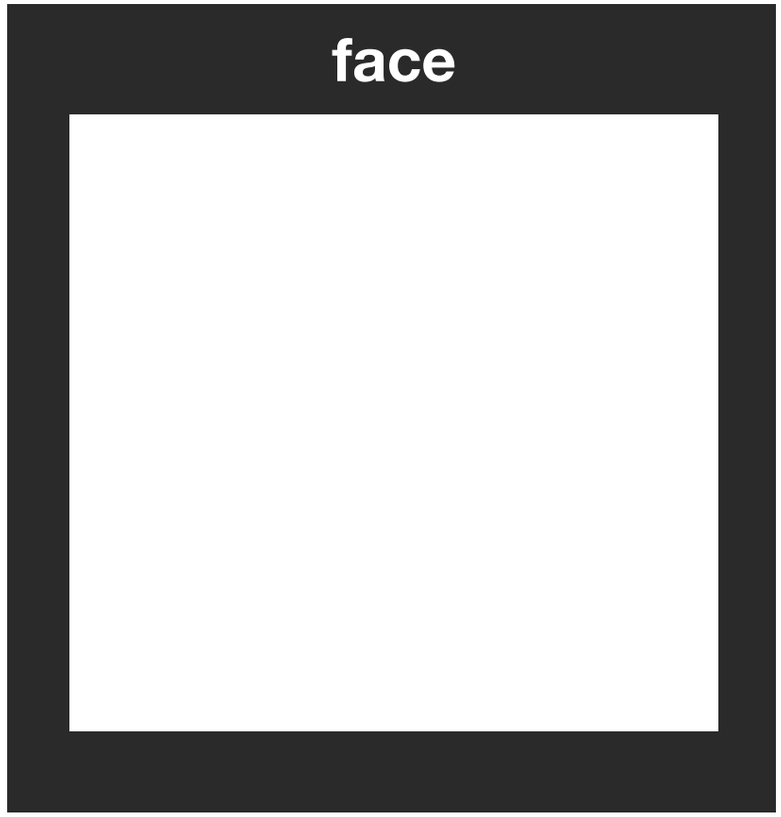

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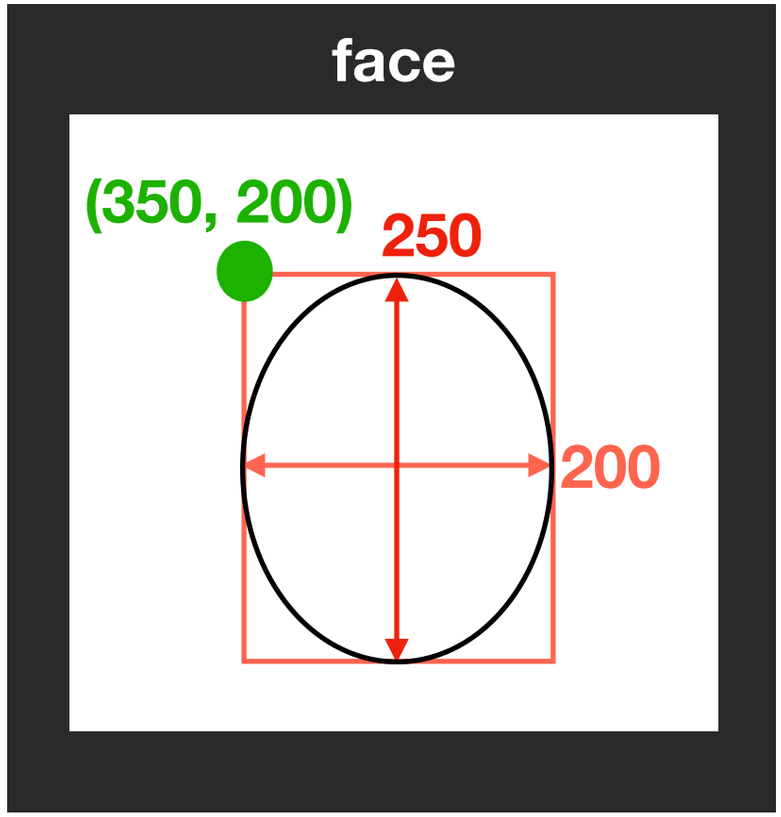

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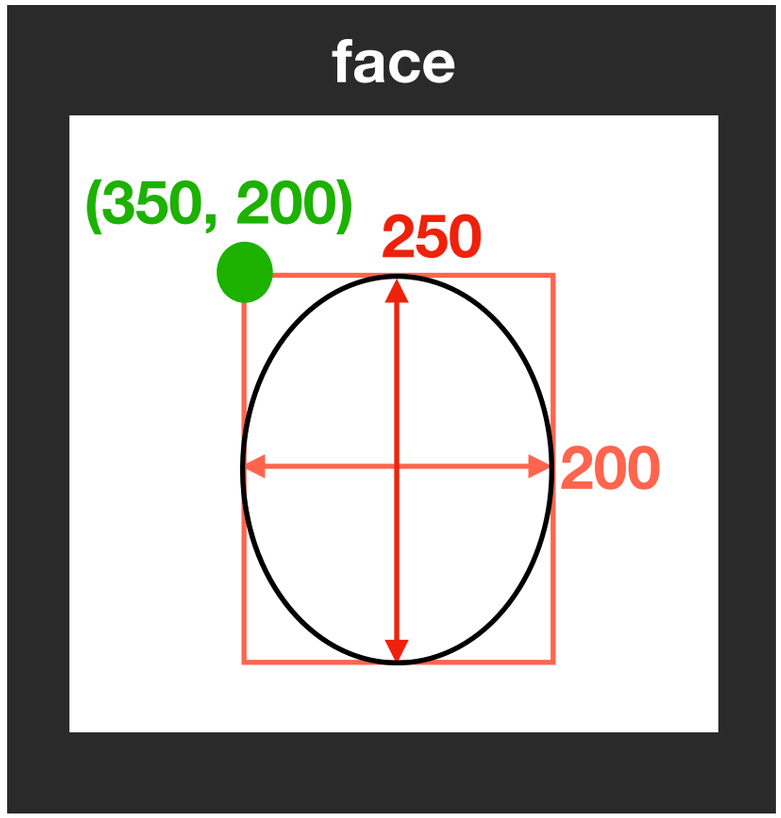

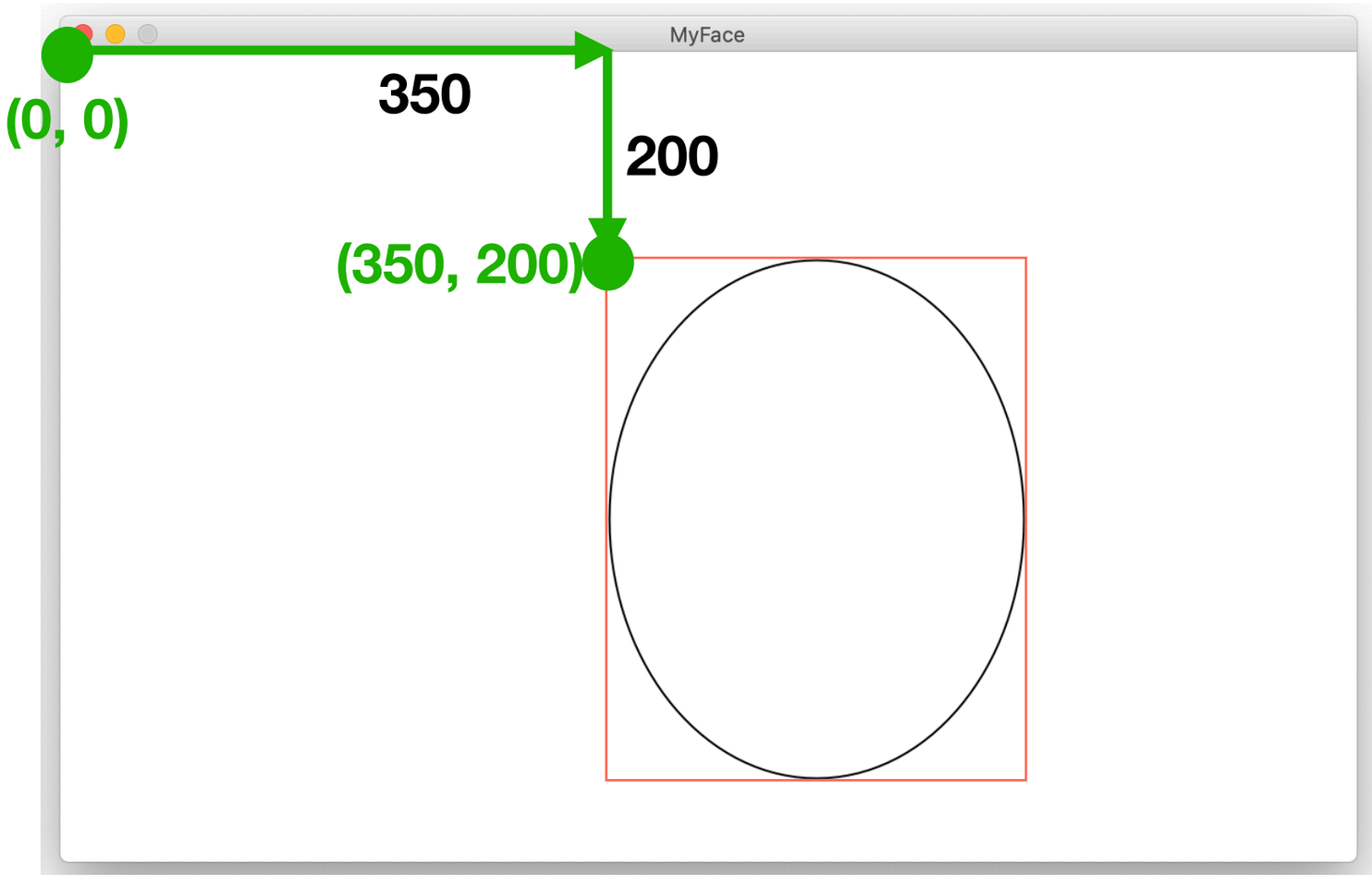

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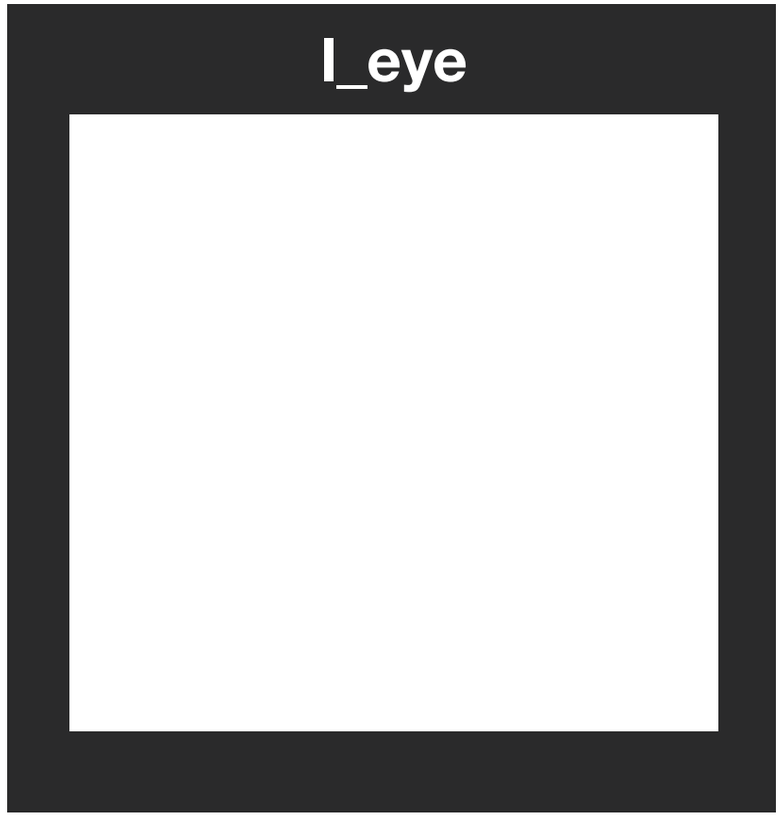

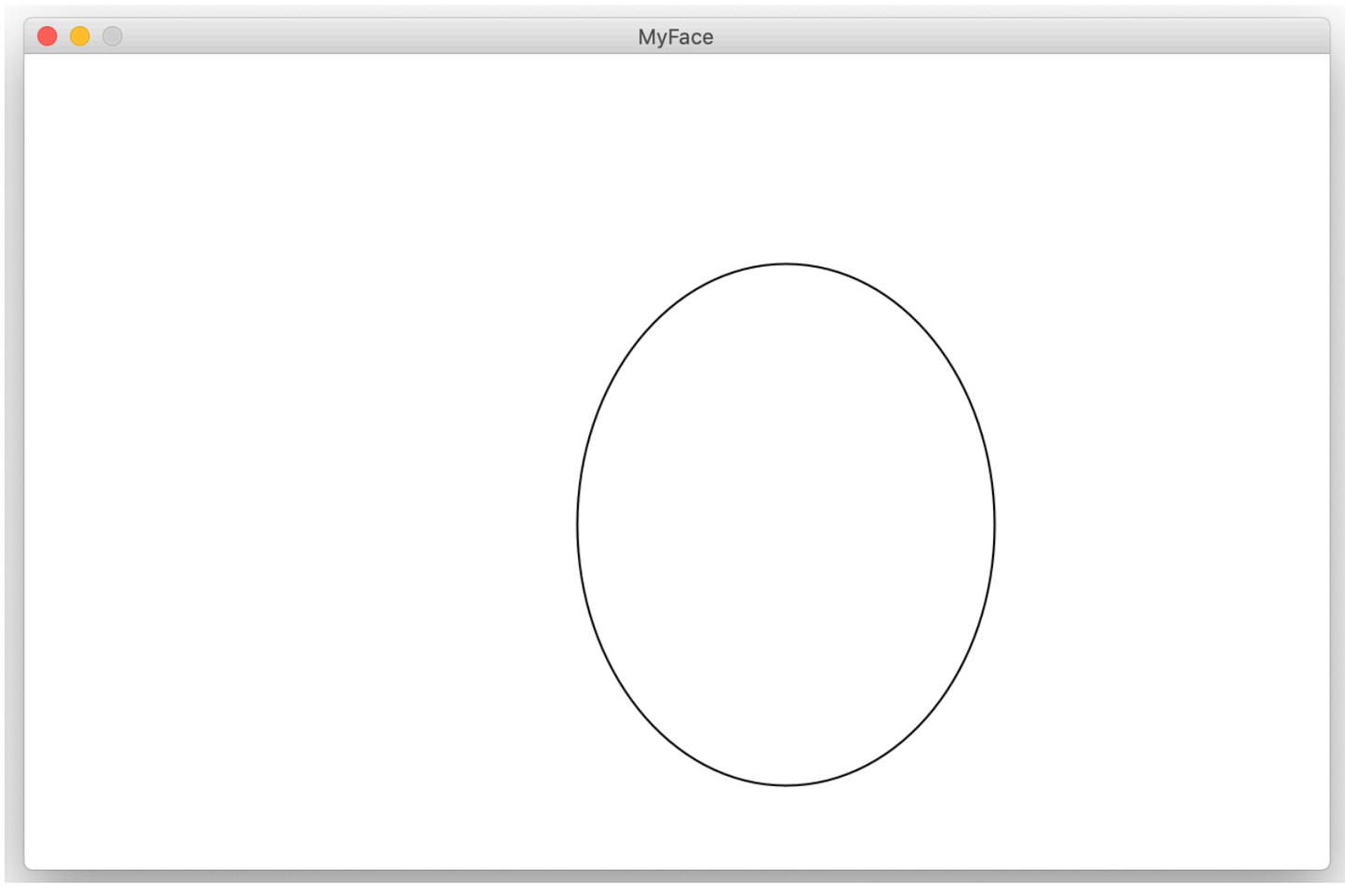

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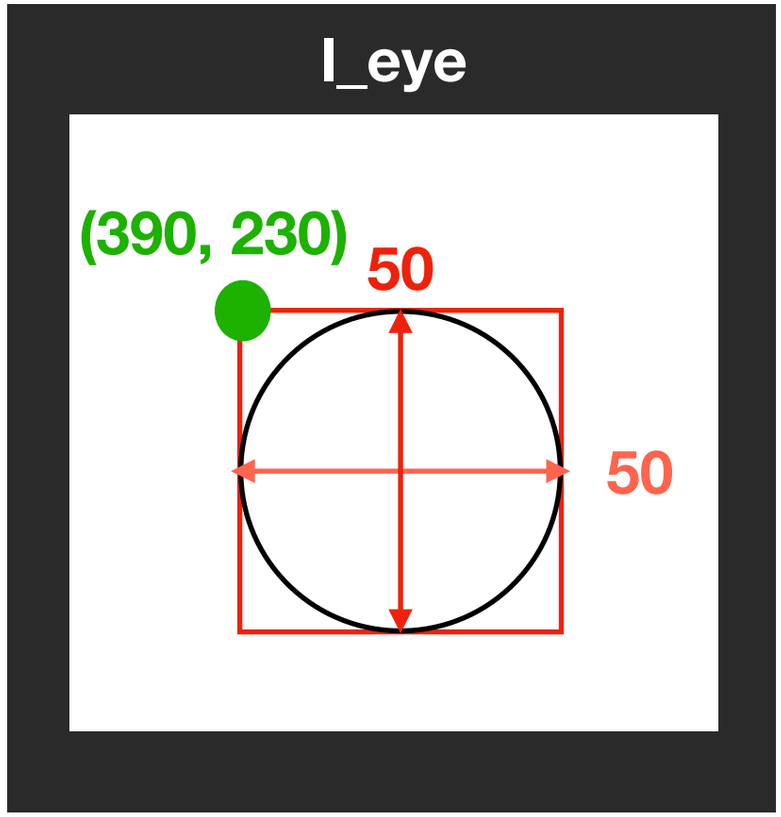

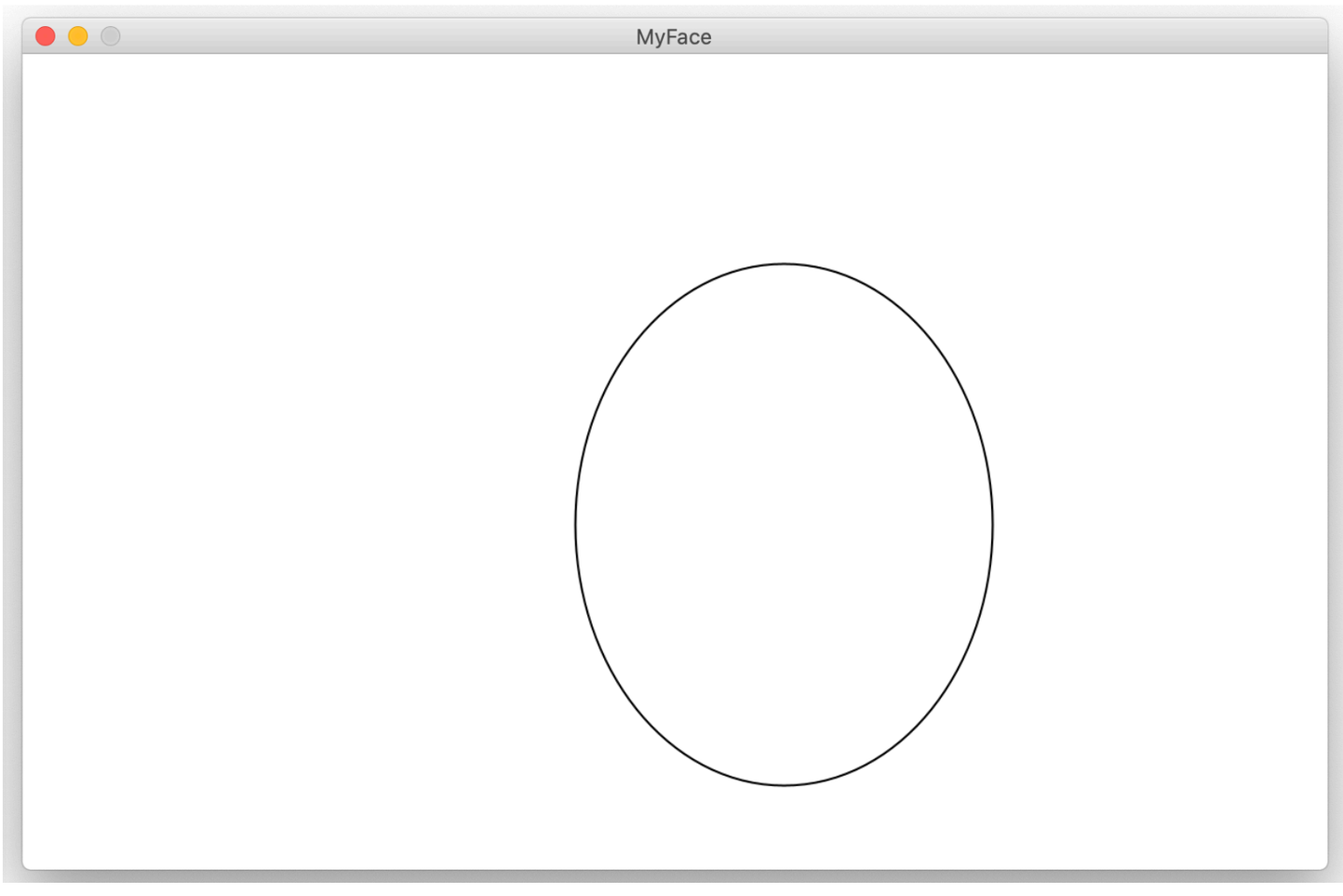

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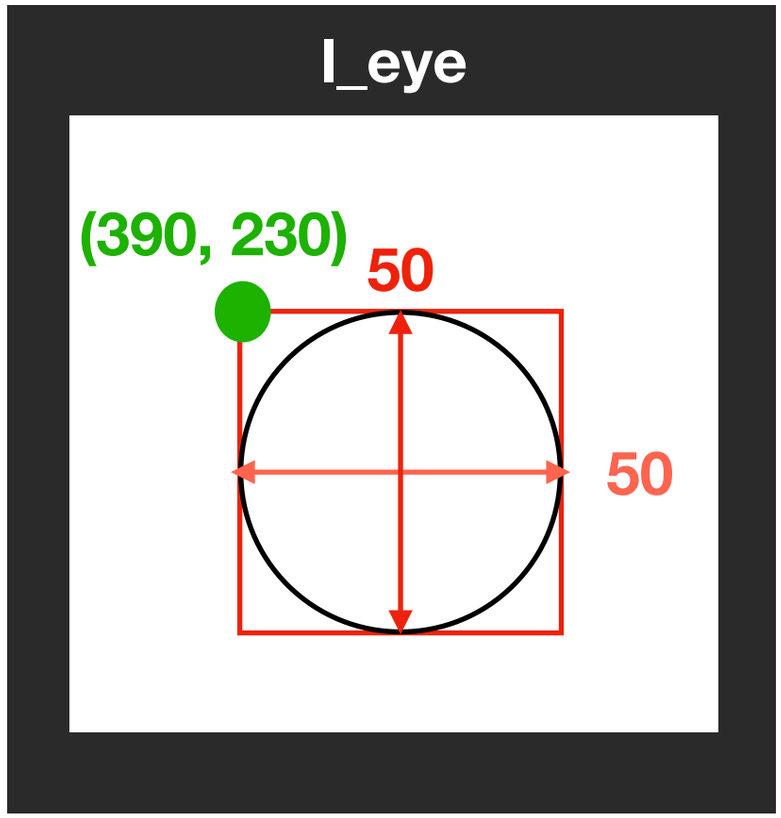

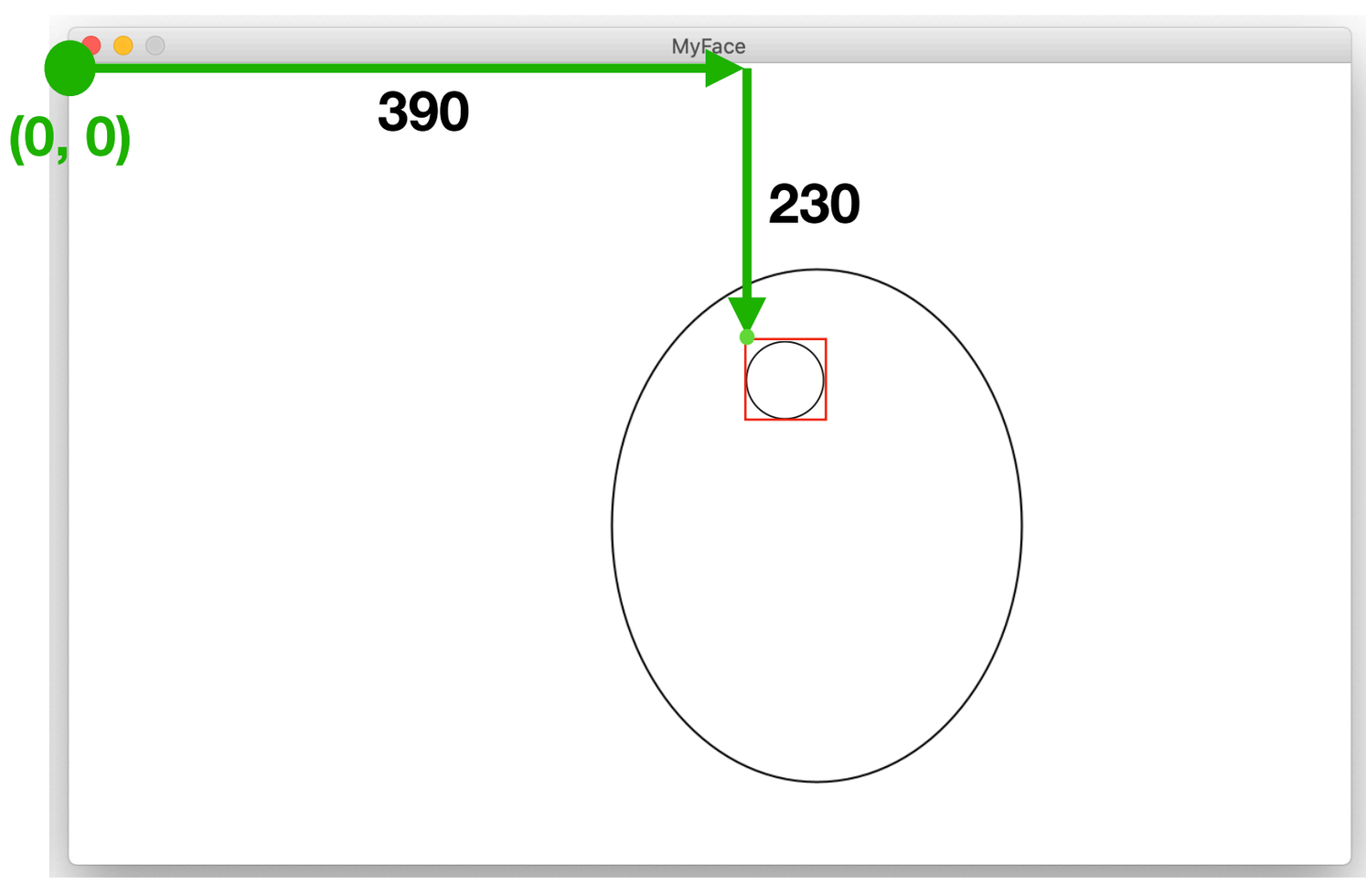

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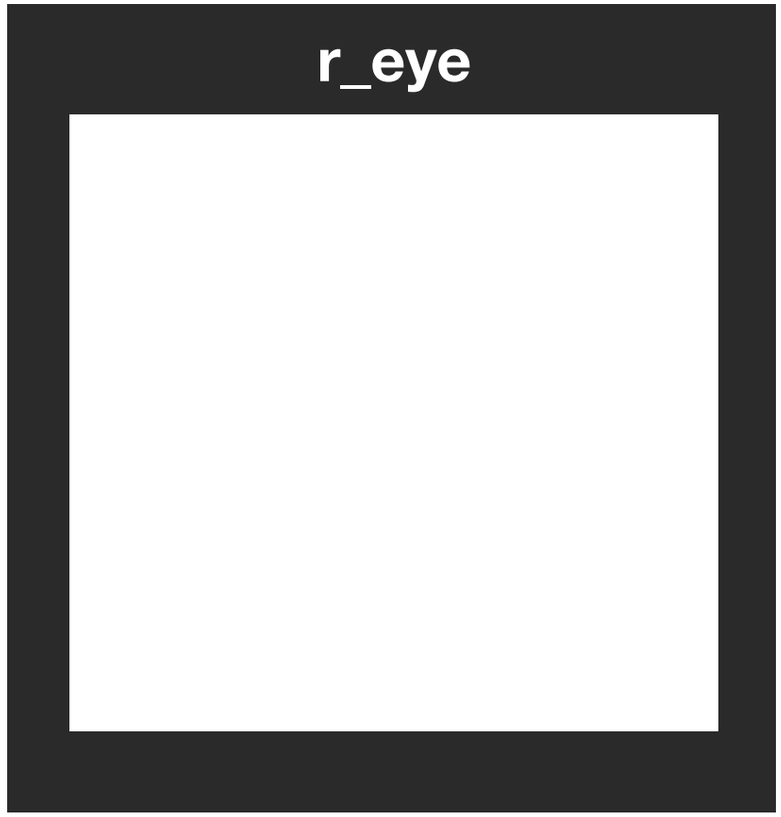

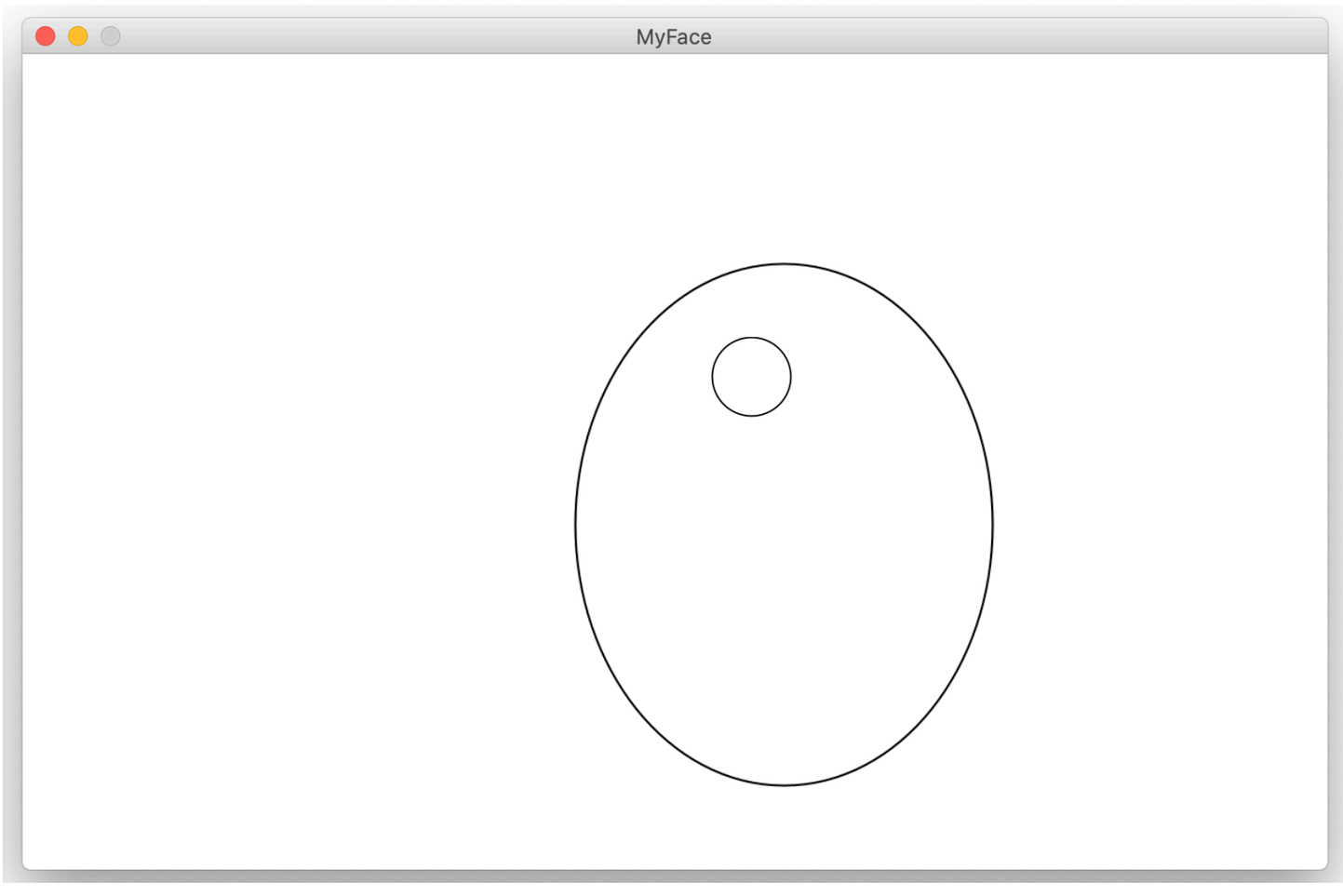

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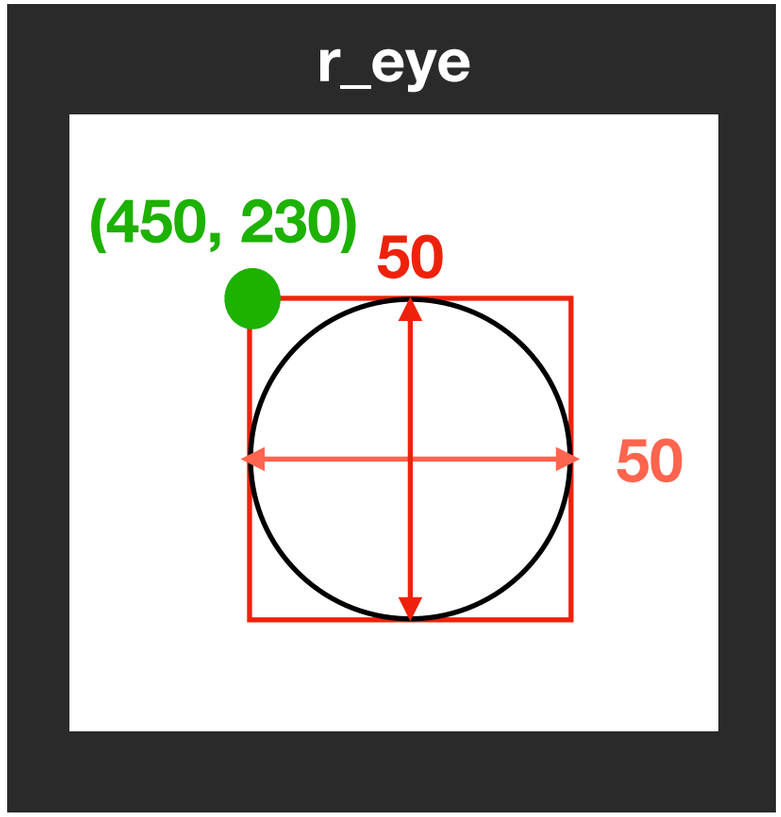

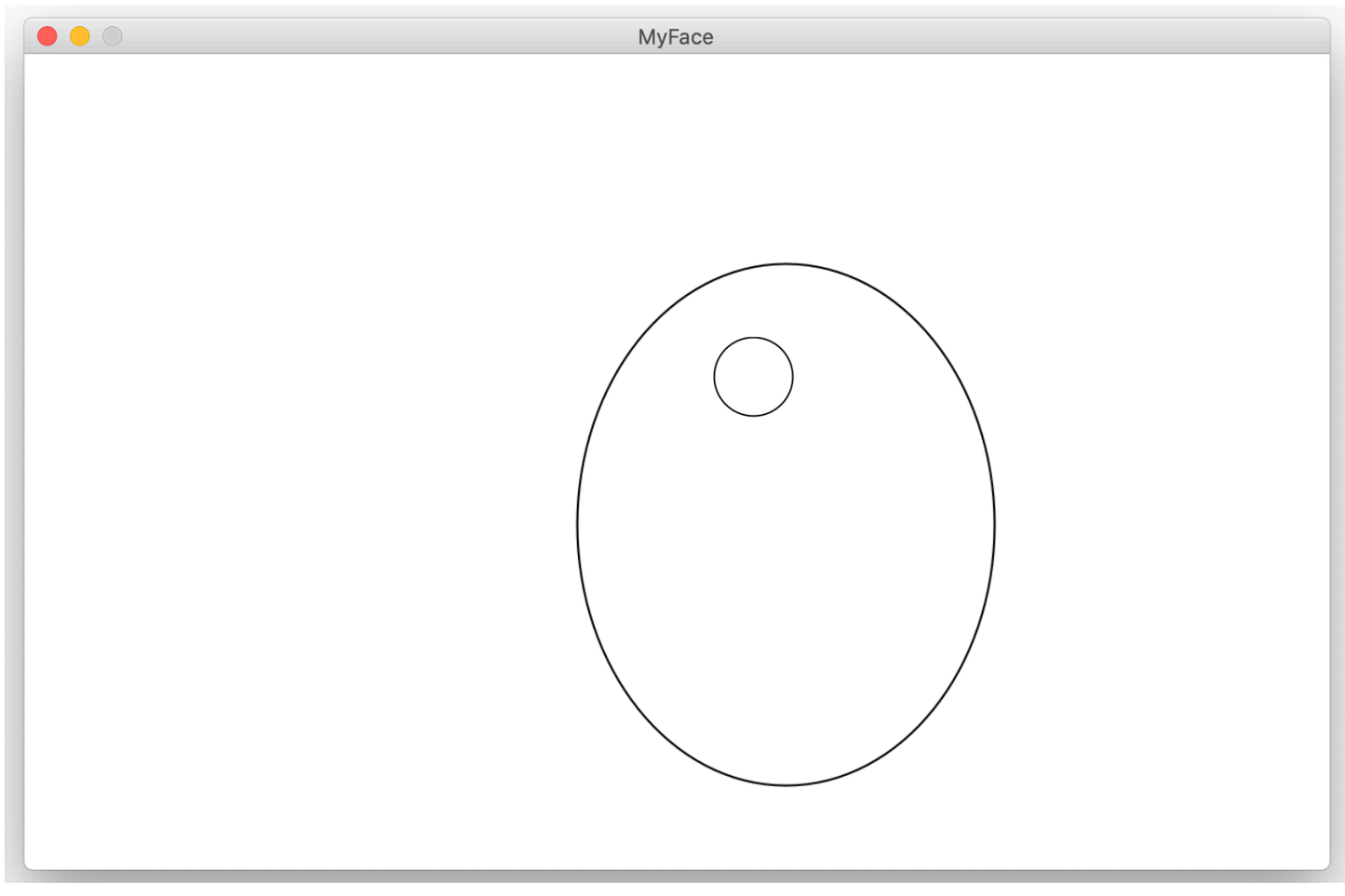

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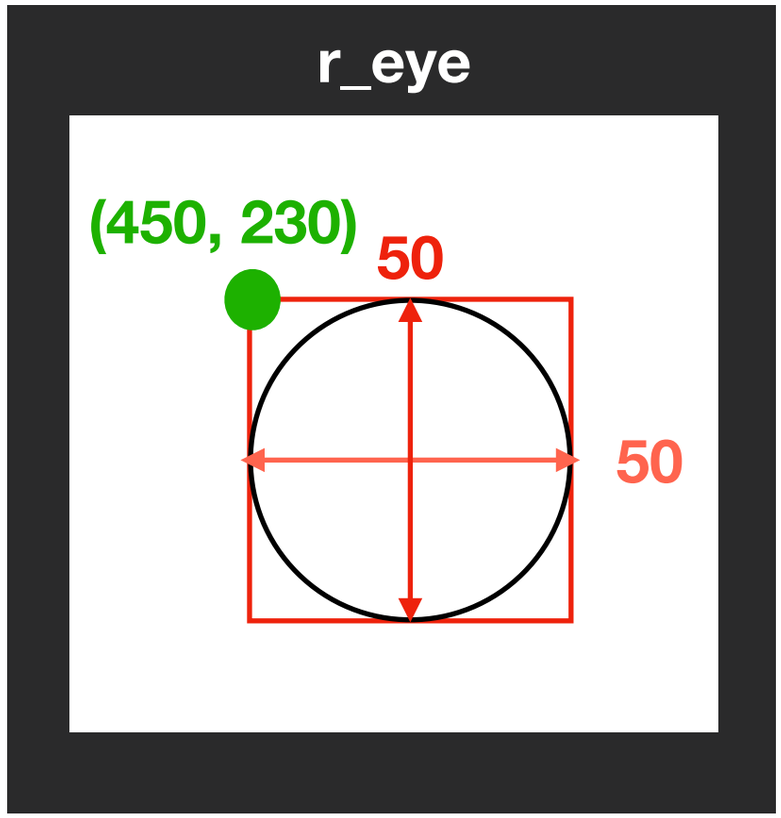

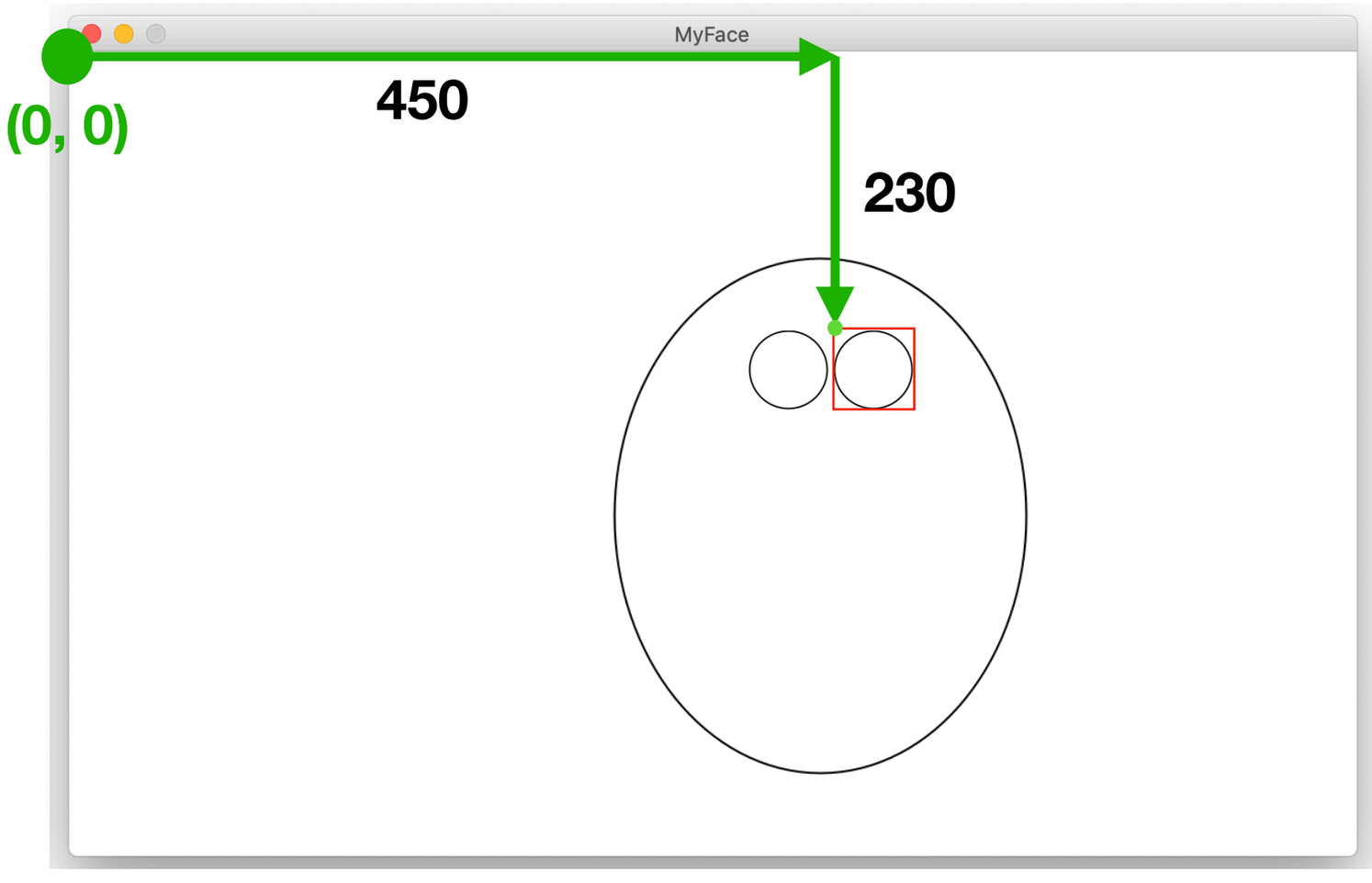

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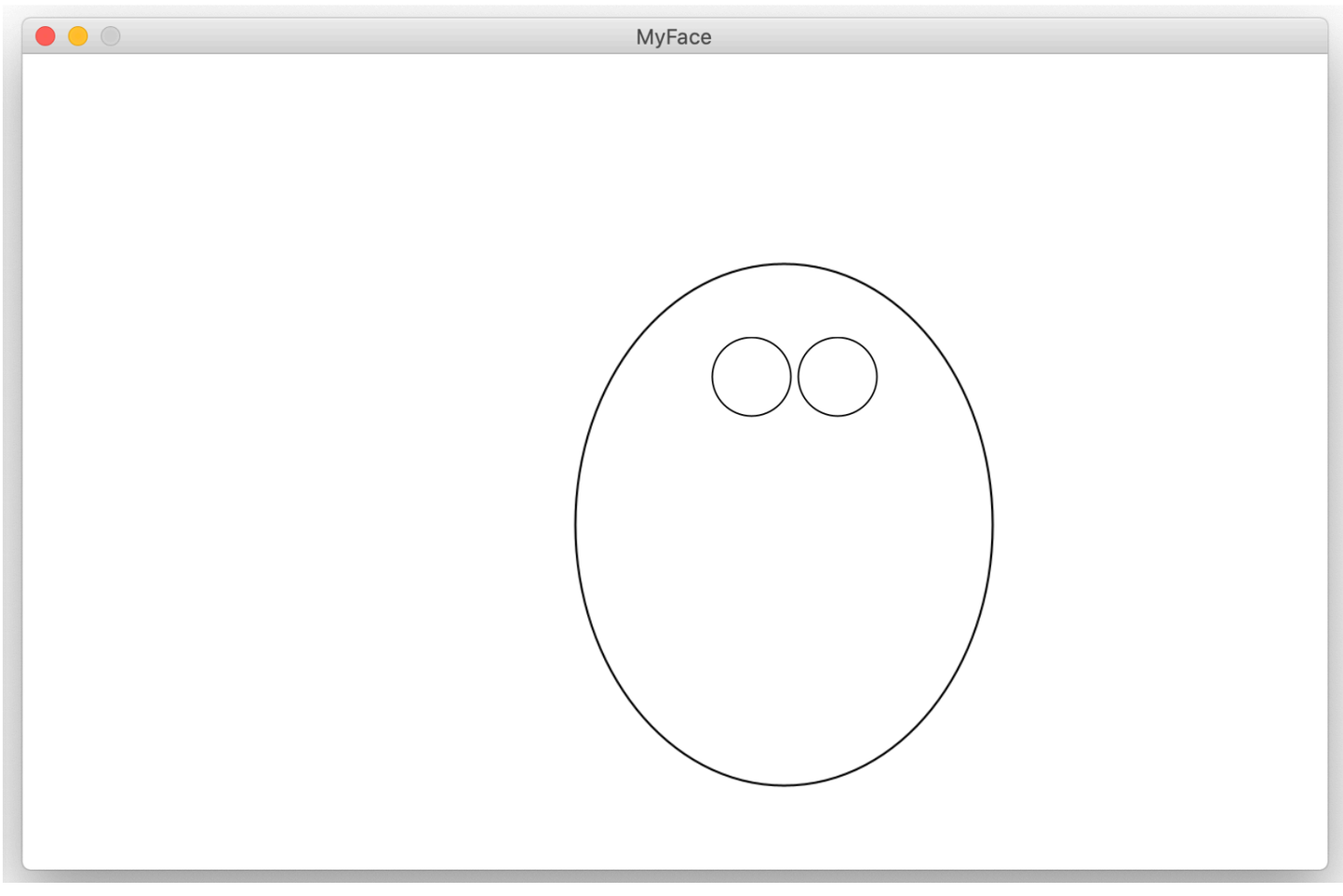

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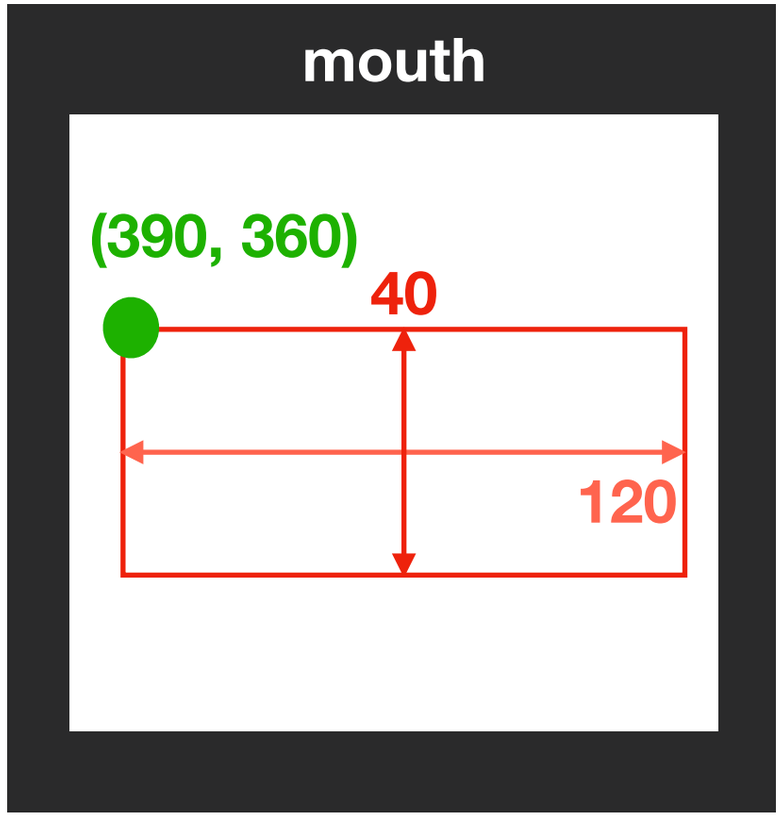

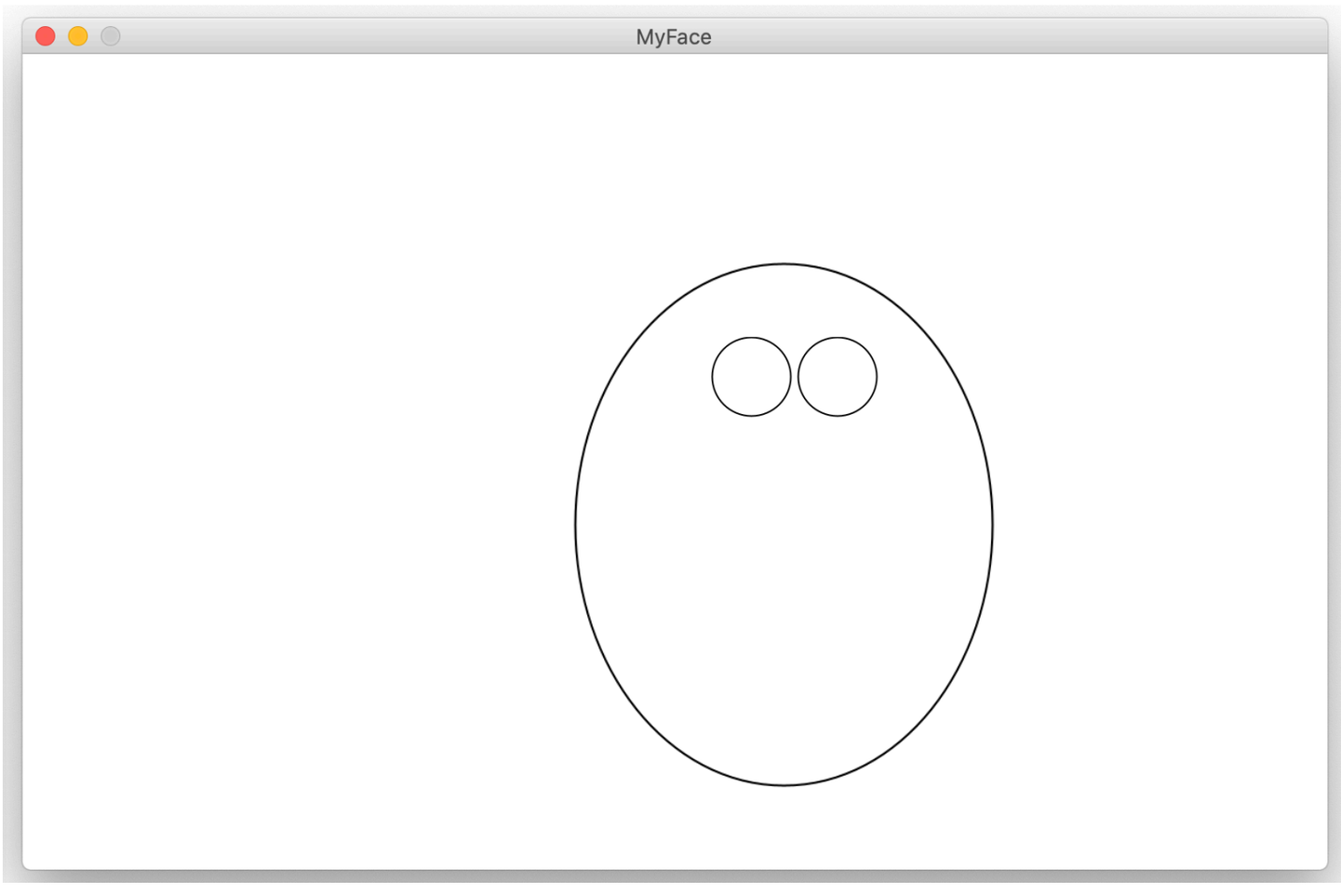

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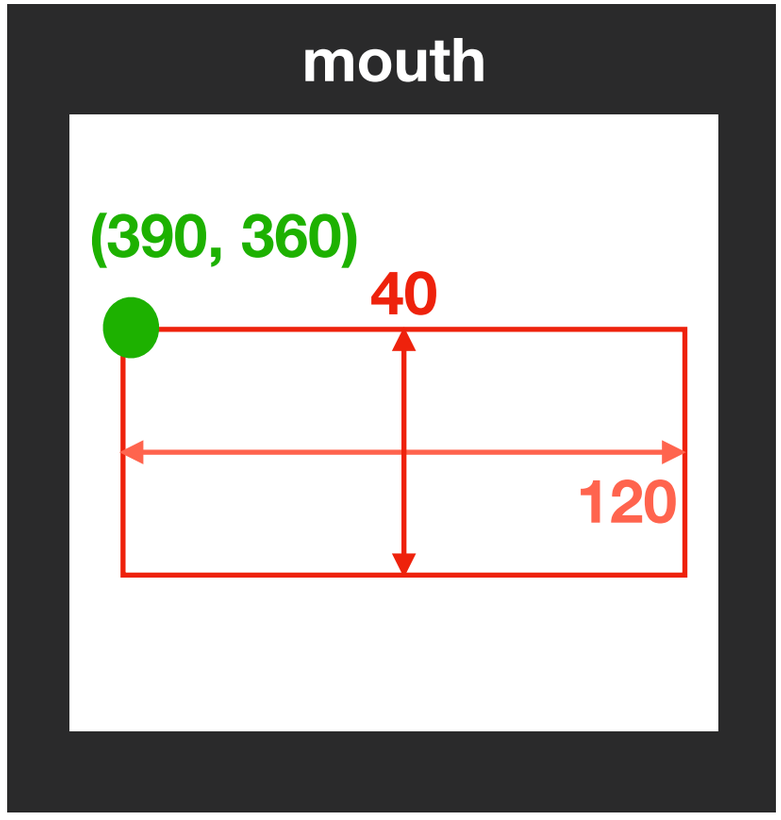
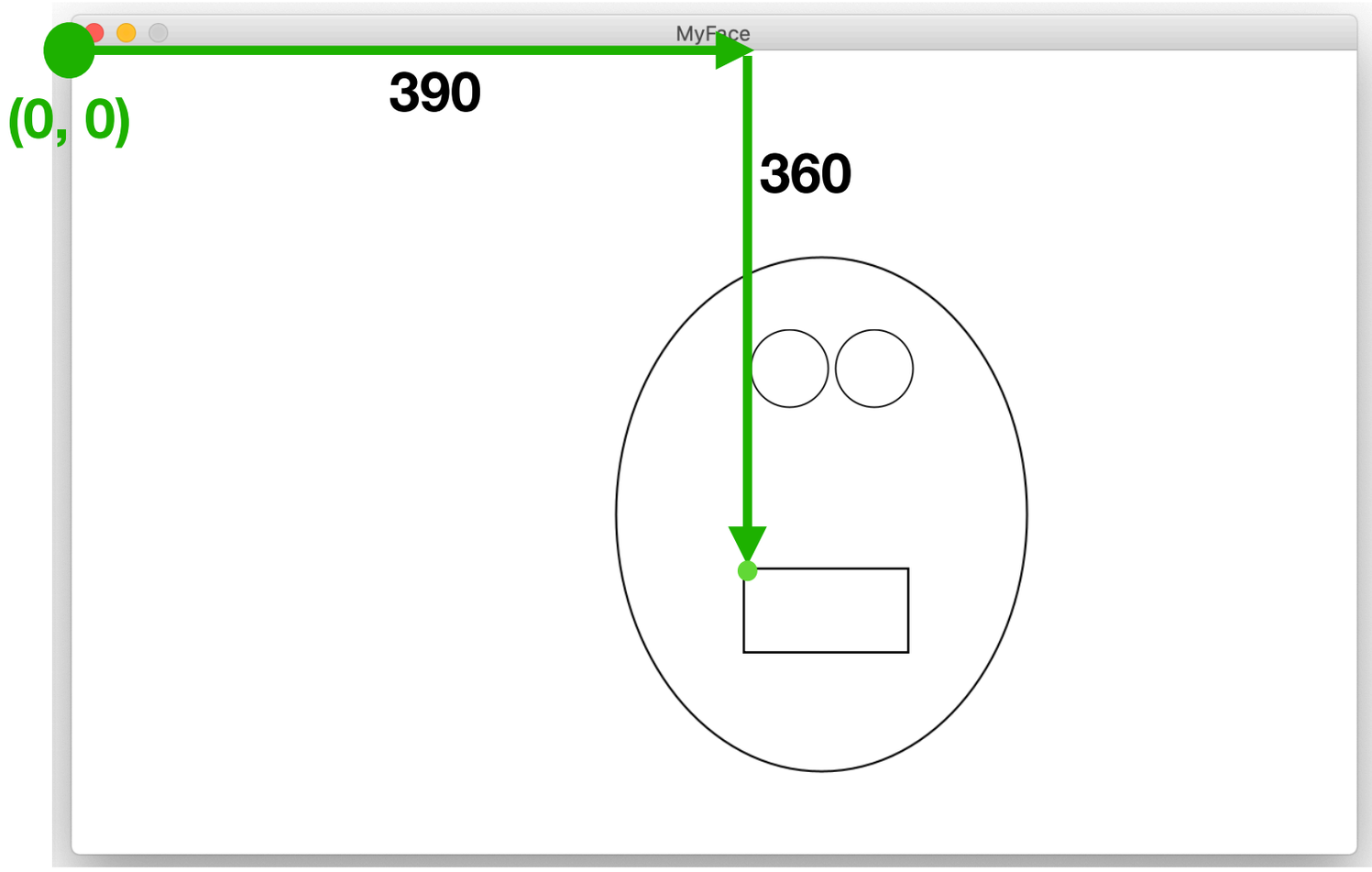
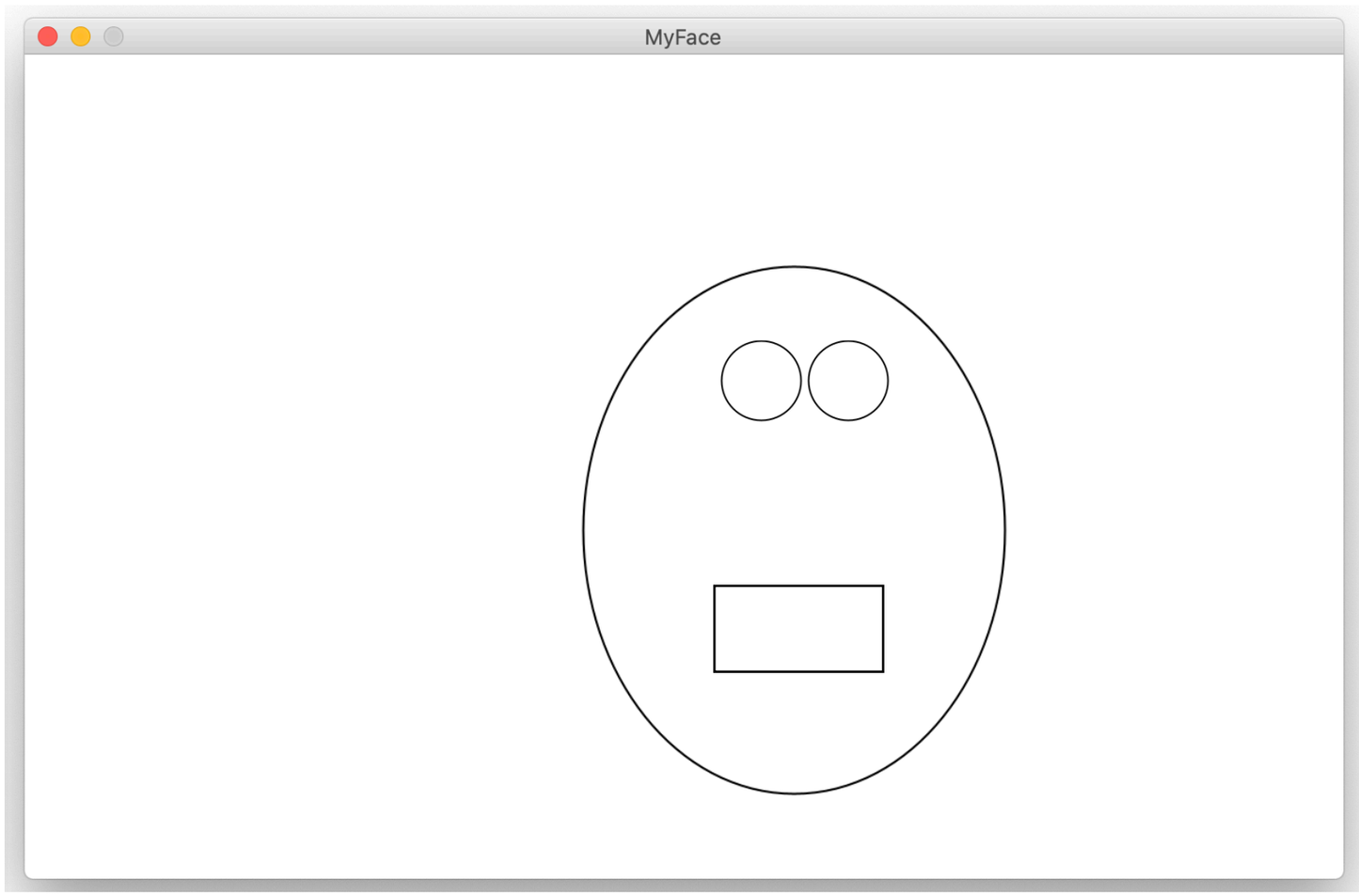
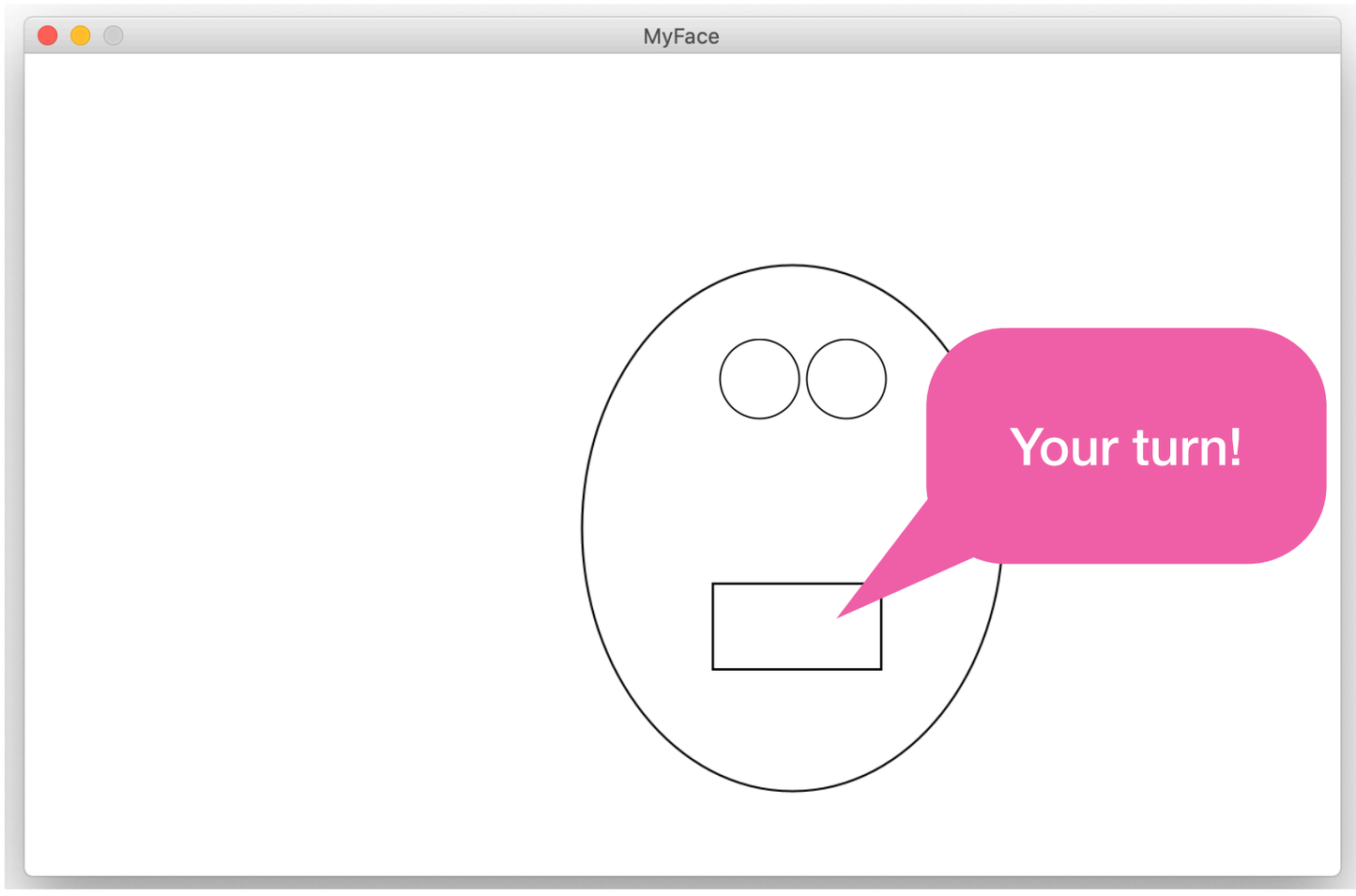





MyFace


MyFace
Your turn!

- ***<u>oval = GOval(寬, 高, x=?, y=?)</u>***
    - oval.filled = True/False
    - oval.fill_color = ’green’

- ***oval = GOval(寬, 高, x=?, y=?)***
  - oval.filled = True/False
  - oval.fill_color = ’green’

- ***rect = GRect(寬, 高, x=?, y=?)***
  - rect.filled = True/False
  - rect.fill_color = ’magenta’

- ***oval = GOval(寬, 高, x=?, y=?)***
  - oval.filled = True/False
  - oval.fill_color = ’green’

- ***rect = GRect(寬, 高, x=?, y=?)***
  - rect.filled = True/False
  - rect.fill_color = ’magenta’

- ***label = GLabel(文字, x=?, y=?)***
  - label.font = ’-40’
  - label.text = ‘new’

- ***oval = GOval(寬, 高, x=?, y=?)***
  - oval.filled = True/False
  - oval.fill_color = ’green’

- ***rect = GRect(寬, 高, x=?, y=?)***
  - rect.filled = True/False
  - rect.fill_color = ’magenta’

- ***label = GLabel(文字, x=?, y=?)***
  - label.font = ’-40’
  - label.text = ‘new’
- ***myLine = GLine(起點x, 起點y, 終點x, 終點y)***

- ***oval = GOval(寬, 高, x=?, y=?)***
    - oval.filled = True/False
    - oval.fill_color = ’green’

- ***rect = GRect(寬, 高, x=?, y=?)***
    - rect.filled = True/False
    - rect.fill_color = ’magenta’

- ***label = GLabel(文字, x=?, y=?)***
    - label.font = ’-40’
    - label.text = ‘new’
- ***myLine = GLine(起點x, 起點y, 終點x, 終點y)***

- **共同擁有*(Inherited from GObject)***
    - **name.width**
    - **name.height**
    - **name.x**
    - **name.y**
    - **name.color = ’magenta’**
    - **name.move(dx, dy)**

- ***oval = GOval(寬, 高, x=?, y=?)***
  - oval.filled = True/False
  - oval.fill_color = ’green’

- ***rect = GRect(寬, 高, x=?, y=?)***
  - rect.filled = True/False
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- **共同擁有*(Inherited from GObject)***
  - **name.width**
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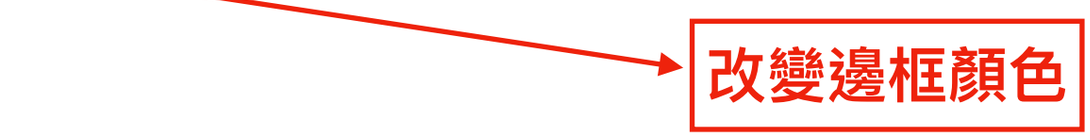


- ***oval = GOval(寬, 高, x=?, y=?)***
  - oval.filled = True/False
  - oval.fill_color = 'green'

- ***rect = GRect(寬, 高, x=?, y=?)***
  - rect.filled = True/False
  - rect.fill_color = 'magenta'

- ***label = GLabel(文字, x=?, y=?)***
  - label.font = '-40'
  - label.text = 'new'
- ***myLine = GLine(起點x, 起點y, 終點x, 終點y)***

- **共同擁有*(Inherited from GObject)***
  - **name.width**
  - **name.height**
  - **name.x**
  - **name.y**
  - **name.color = 'magenta'**
  - **name.move(dx, dy)**

填滿黑色

- ***oval = GOval(寬, 高, x=?, y=?)***
  - oval.filled = True/False
  - oval.fill_color = 'green'

- ***rect = GRect(寬, 高, x=?, y=?)***
  - rect.filled = True/False
  - rect.fill_color = 'magenta'

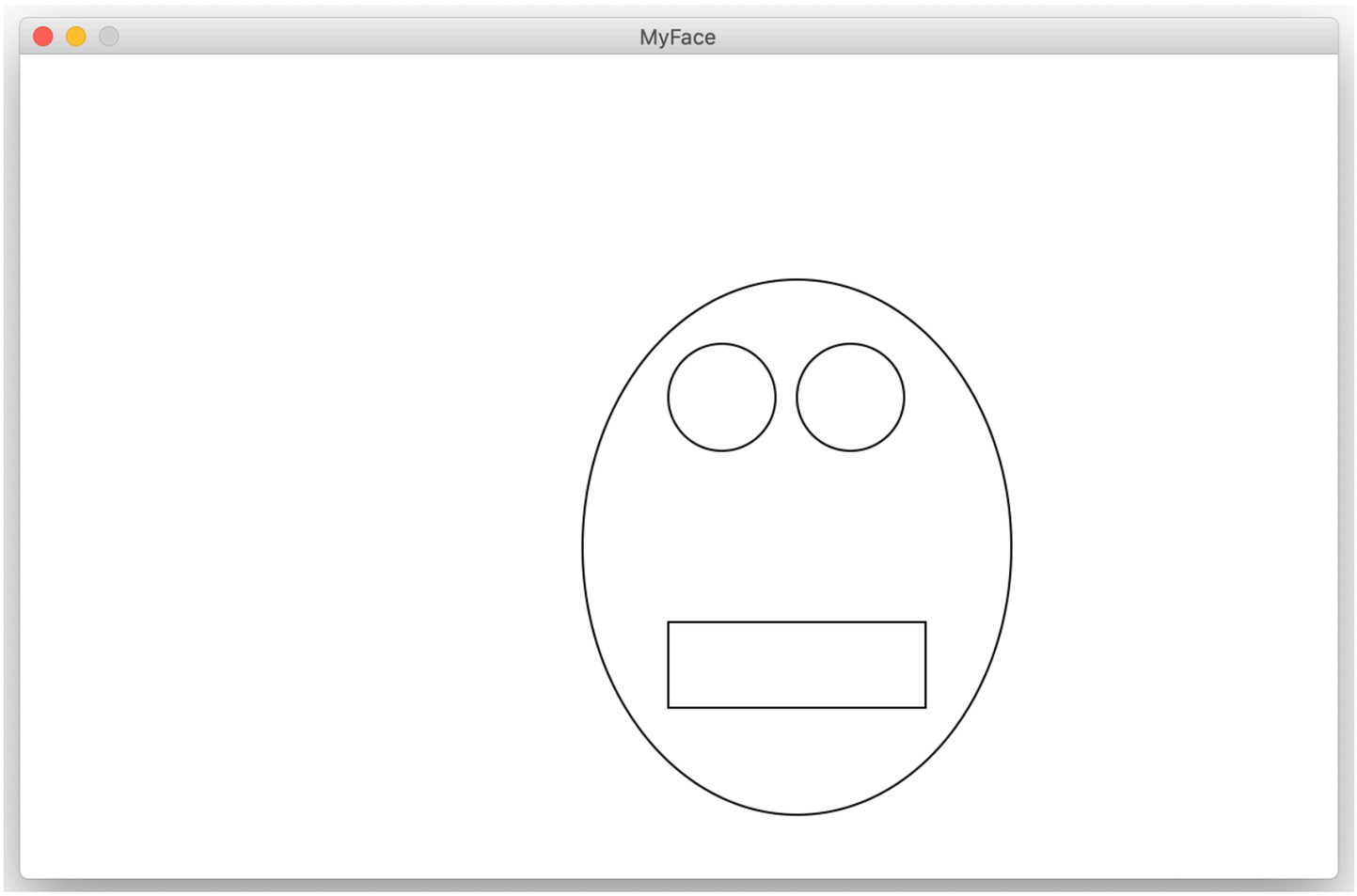
填滿顏色

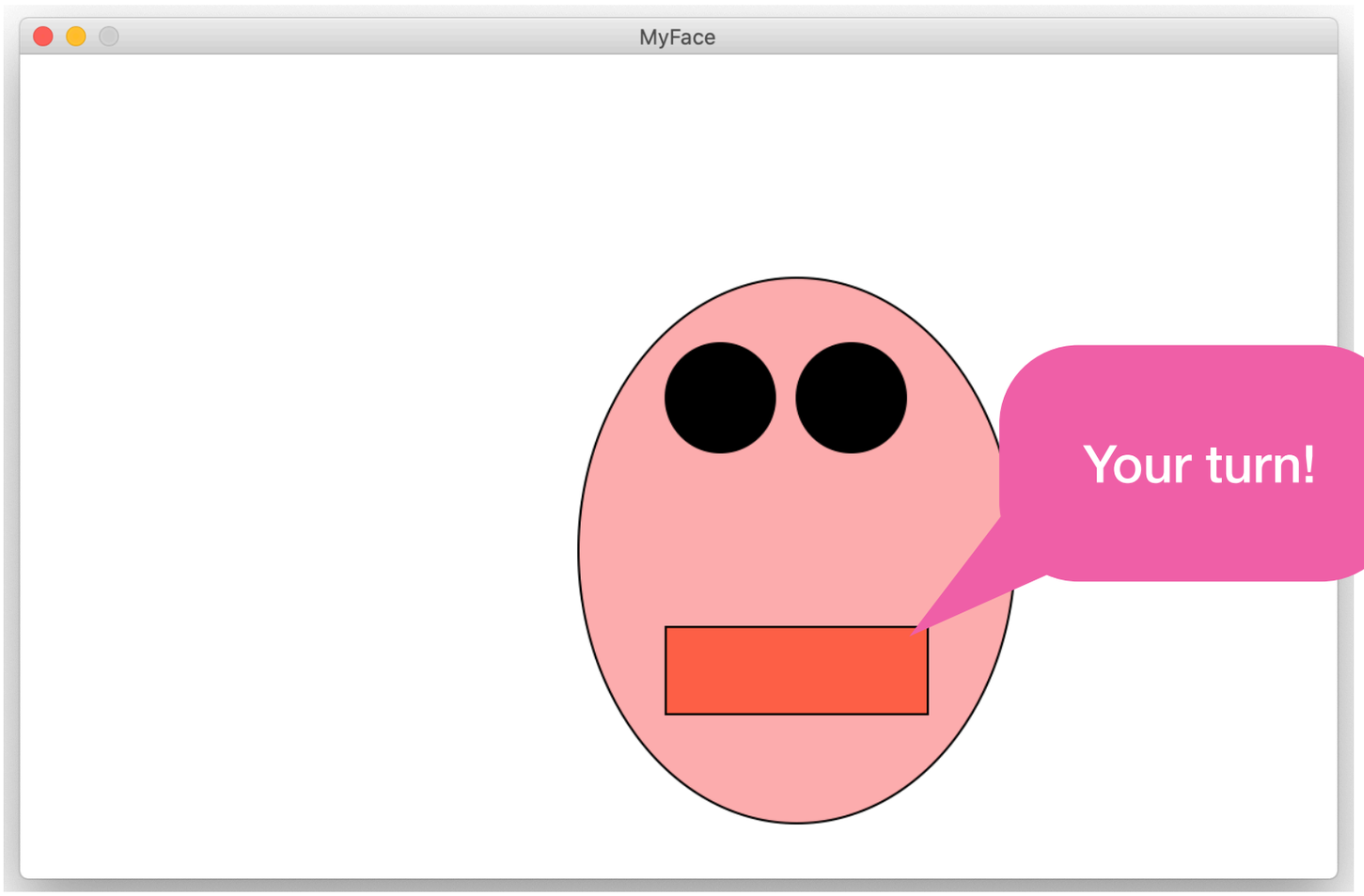
- ***label = GLabel(文字, x=?, y=?)***
  - label.font = '-40'
  - label.text = 'new'
- ***myLine = GLine(起點x, 起點y, 終點x, 終點y)***

- **共同擁有*(Inherited from GObject)***
  - **name.width**
  - **name.height**
  - **name.x**
  - **name.y**
  - **name.color = 'magenta'**
  - **name.move(dx, dy)**

color 選項

'aliceblue'	'antiquewhite'	'aqua'	'aquamarine'	'azure'
'beige'	'bisque'	'black'	'blanchedalmond'	'blue'
'blueviolet'	'brown'	'burlywood'	'cadetblue'	'chartreuse'
'chocolate'	'coral'	'cornflowerblue'	'cornsilk'	'crimson'
'cyan'	'darkblue'	'darkcyan'	'darkgoldenrod'	'darkgray'
'darkgreen'	'darkgrey'	'darkkhaki'	'darkmagenta'	'darkolivegreen'
'darkorange'	'darkorchid'	'darkred'	'darksage'	'darksalmon'
'darkseagreen'	'darkslateblue'	'darkslategray'	'darkslategrey'	'darkturquoise'
'darkviolet'	'deeppink'	'deepskyblue'	'dimgray'	'dimgrey'
'dodgerblue'	'firebrick'	'floralwhite'	'forestgreen'	'fuchsia'
'gainsboro'	'ghostwhite'	'gold'	'goldenrod'	'gray'
'green'	'greenyellow'	'grey'	'honeydew'	'hotpink'
'indianred'	'indigo'	'ivory'	'khaki'	'lavender'
'lavenderblush'	'lawngreen'	'lemonchiffon'	'lightblue'	'lightcoral'
'lightcyan'	'lightgoldenrodyellow'	'lightgray'	'lightgreen'	'lightgrey'
'lightpink'	'lightsage'	'lightsalmon'	'lightseagreen'	'lightskyblue'
'lightslategray'	'lightslategrey'	'lightsteelblue'	'lightyellow'	'lime'
'limegreen'	'linen'	'magenta'	'maroon'	'mediumaquamarine'
'mediumblue'	'mediumorchid'	'mediumpurple'	'mediumseagreen'	'mediumslateblue'
'mediumspringgreen'	'mediumturquoise'	'mediumvioletred'	'midnightblue'	'mintcream'
'mistyrose'	'moccasin'	'navajowhite'	'navy'	'oldlace'
'olive'	'olivedrab'	'orange'	'orangered'	'orchid'
'palegoldenrod'	'palegreen'	'paleturquoise'	'palevioletred'	'papayawhip'
'peachpuff'	'peru'	'pink'	'plum'	'powderblue'
'purple'	'red'	'rosybrown'	'royalblue'	'saddlebrown'
'sage'	'salmon'	'sandybrown'	'seagreen'	'seashell'
'sienna'	'silver'	'skyblue'	'slateblue'	'slategray'
'slategrey'	'snow'	'springgreen'	'steelblue'	'tan'
'teal'	'thistle'	'tomato'	'turquoise'	'violet'
'wheat'	'white'	'whitesmoke'	'yellow'	'yellowgreen'


MyFace


MyFace
Your turn!

GLabel

```
from campy.graphics.gobjects import GLabel
from campy.graphics.gwindow import GWindow


def main():
    window = GWindow(width=800, height=500, title='MyLabel')
    label = GLabel('Hello, world!')
    label.font = '-40'
    label.color = 'magenta'
    window.add(label, x=100, y=200)
```

```
from campy.graphics.gobjects import GLabel
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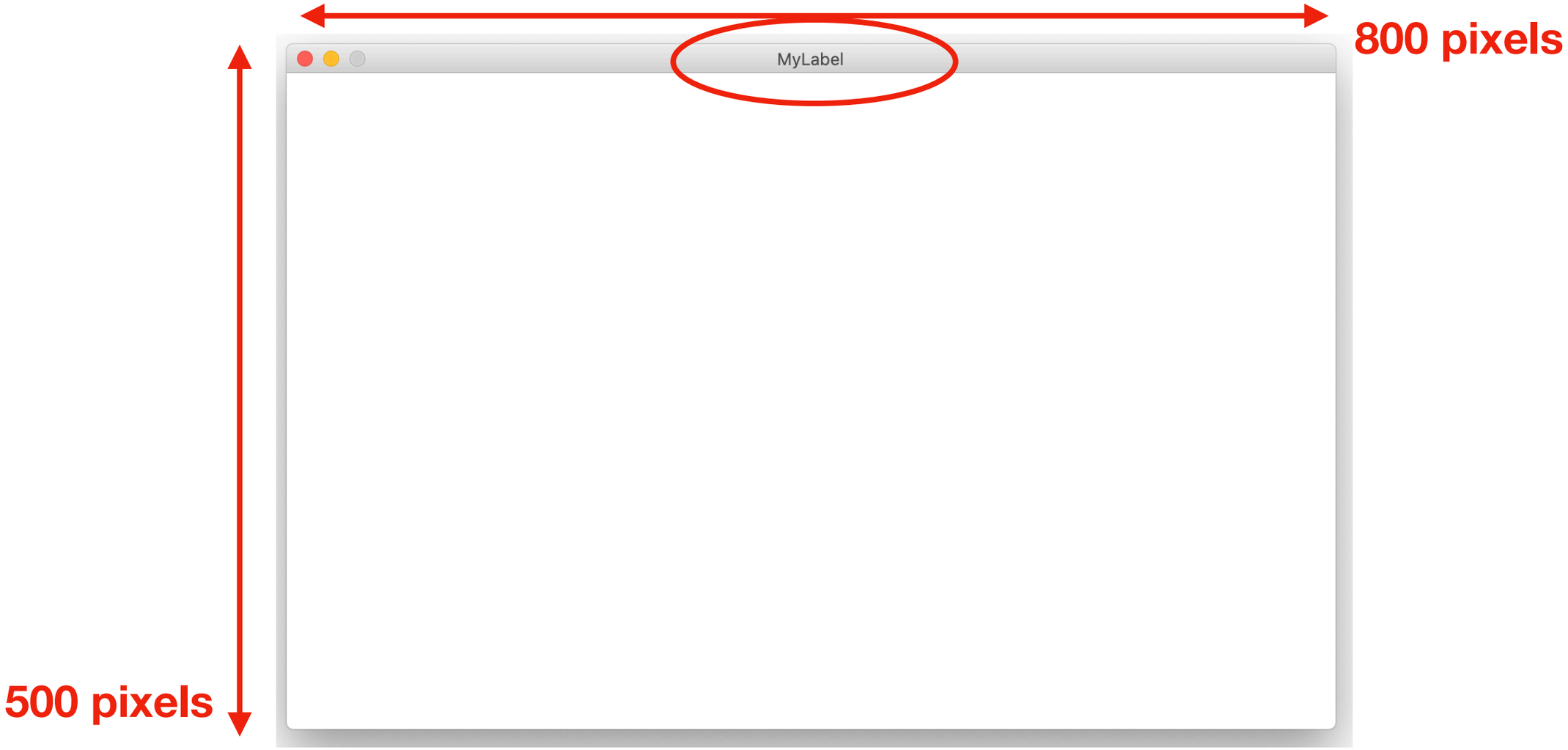

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```
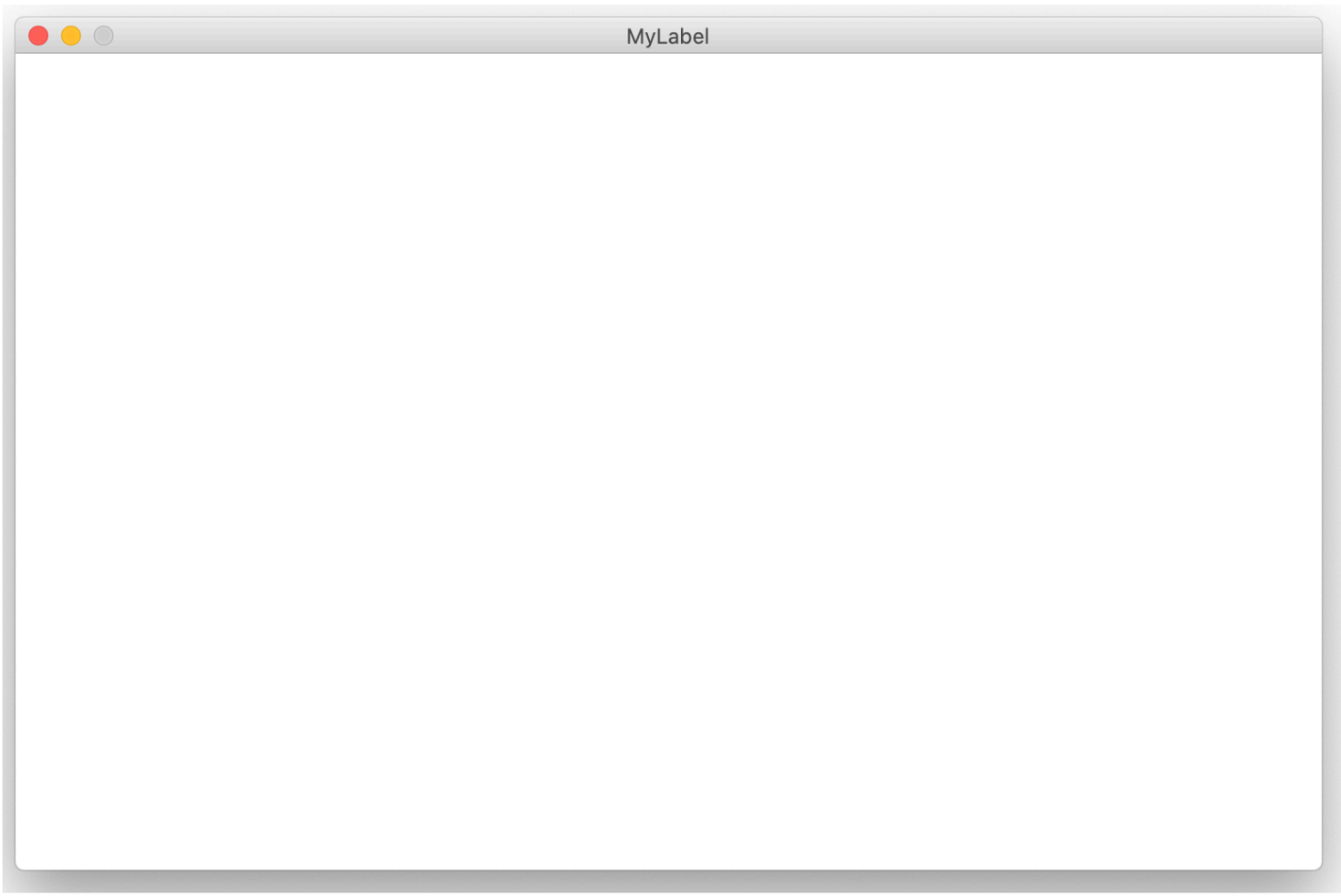

label



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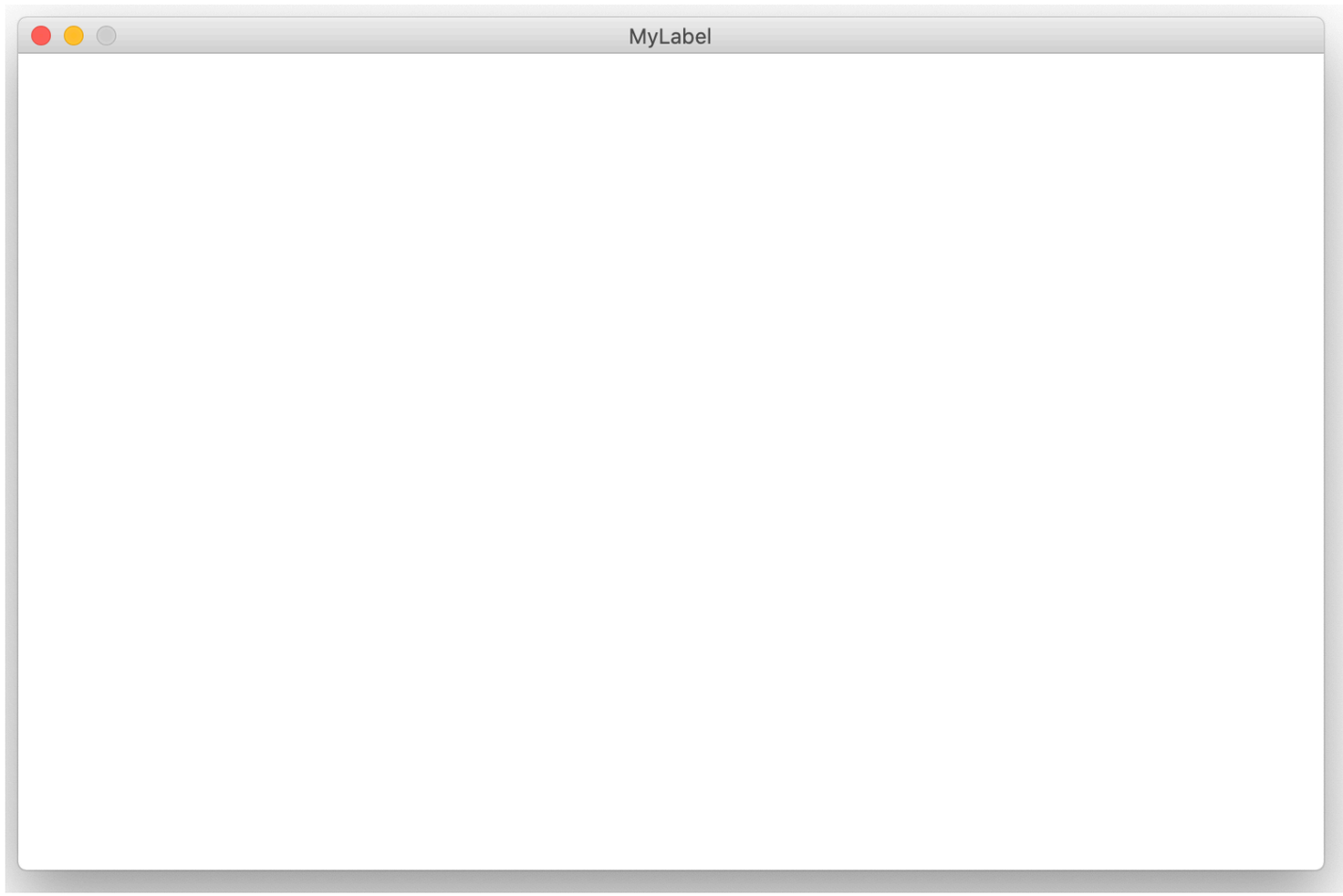
```

label

Hello, world!



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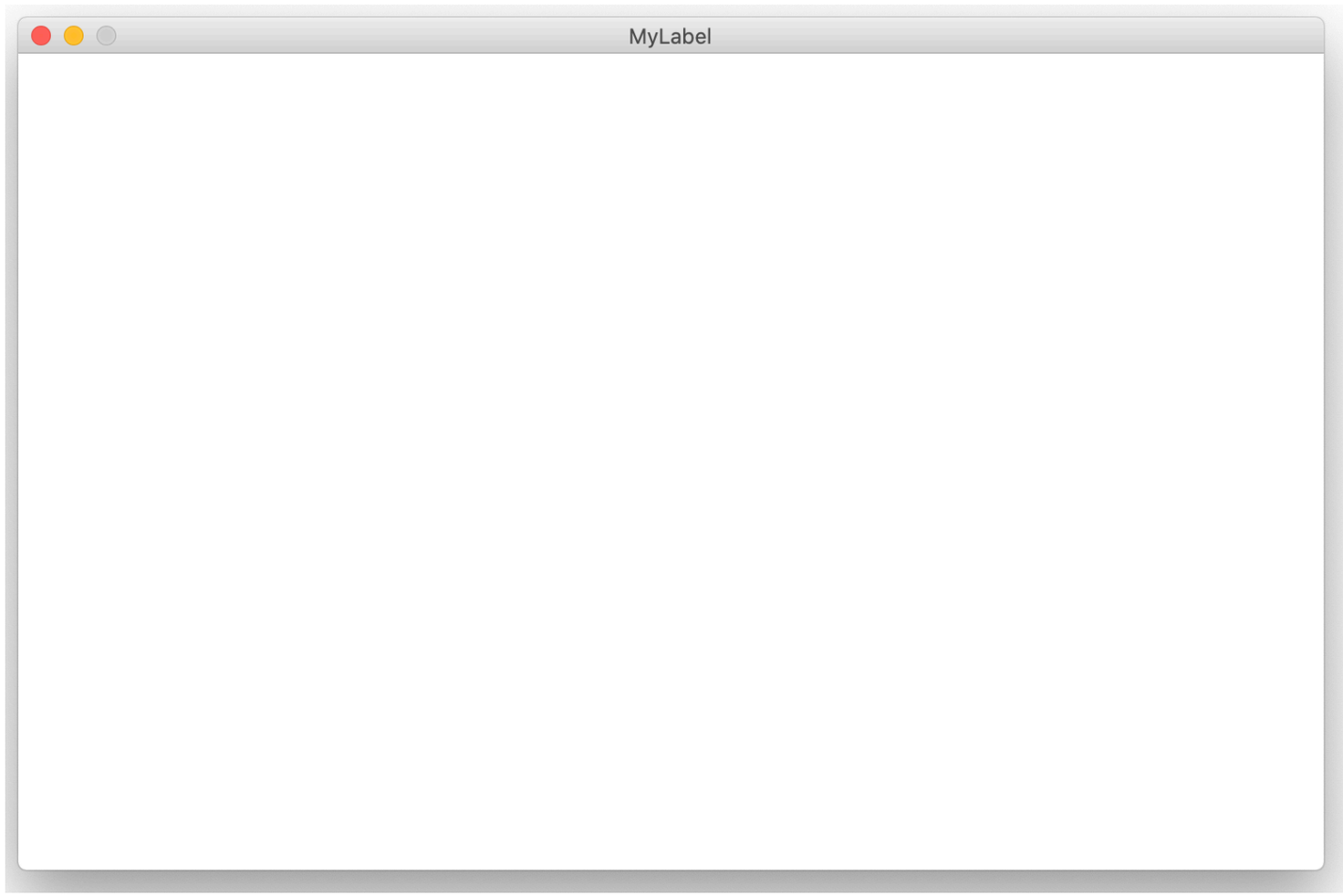
label

Hello, world!



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```
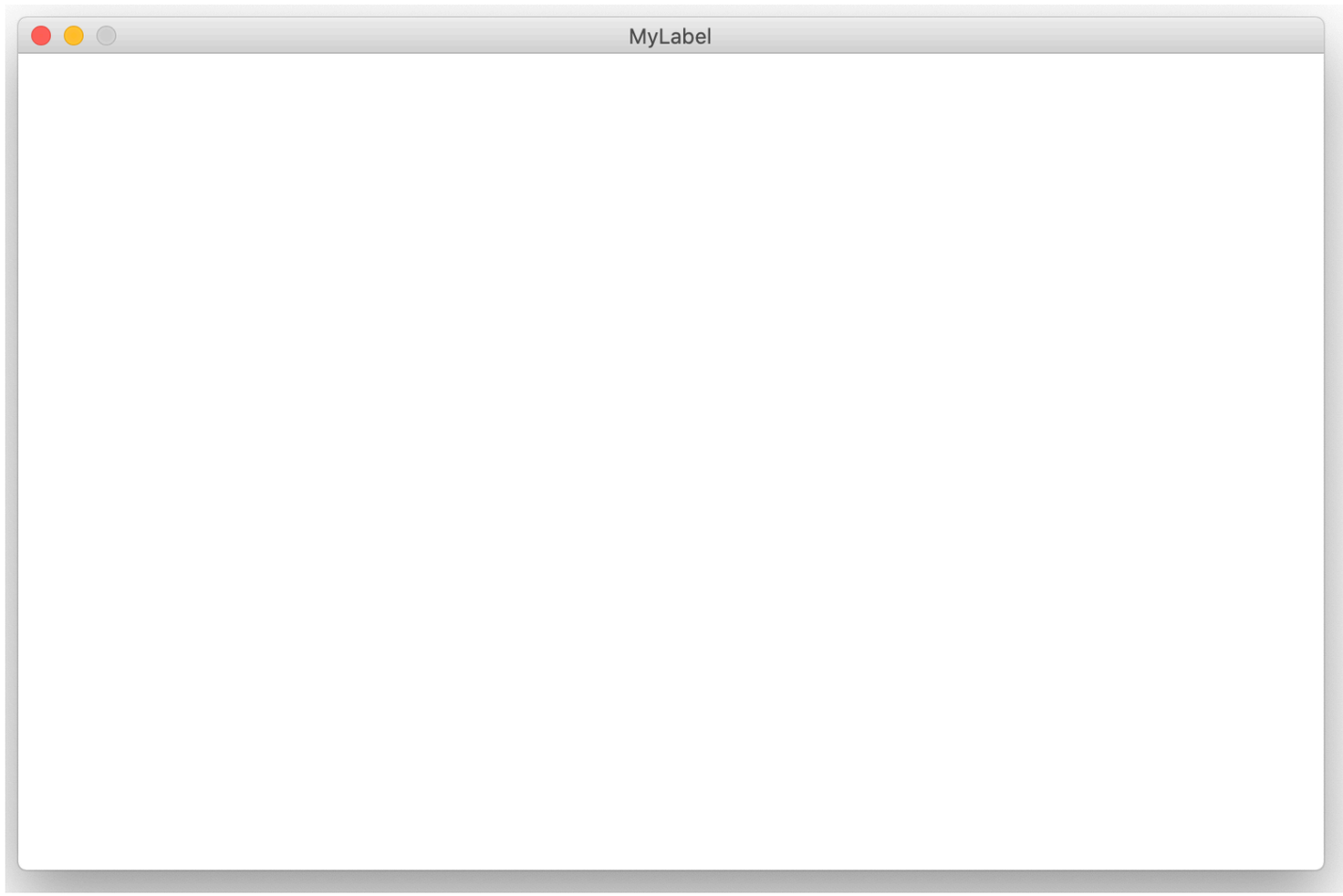

label

Hello, world!



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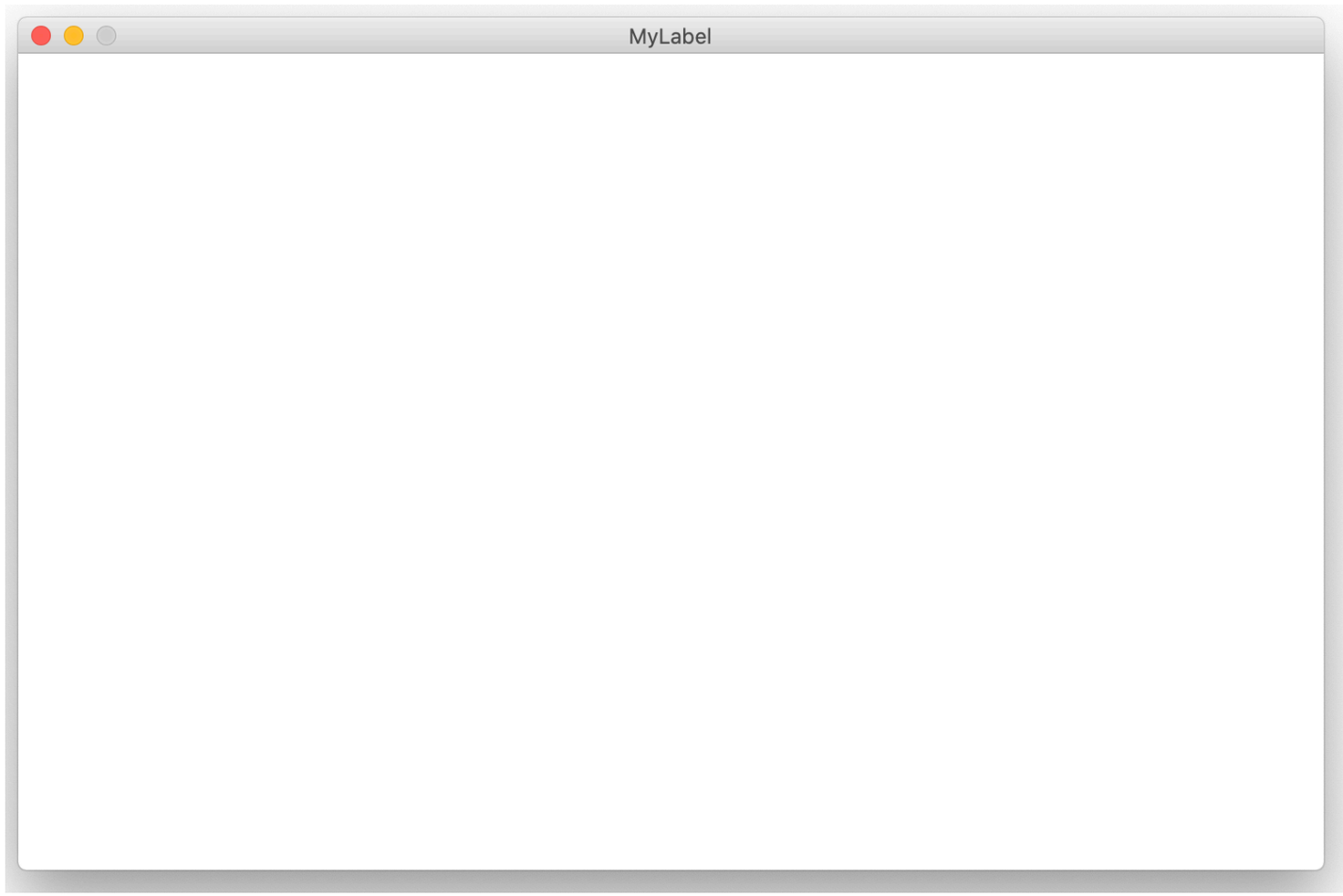
label

Hello, world!



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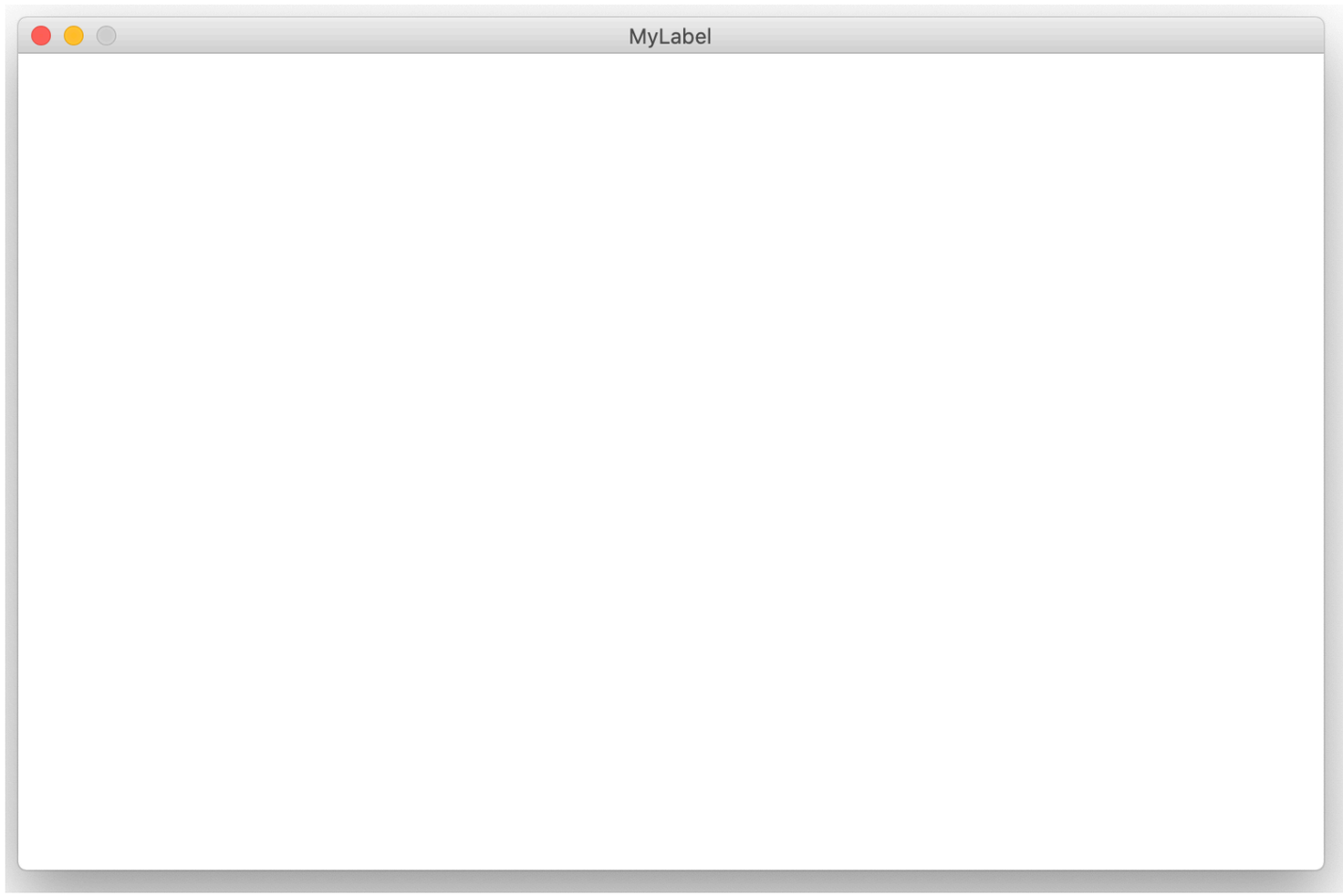
```

label

Hello, world!



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```
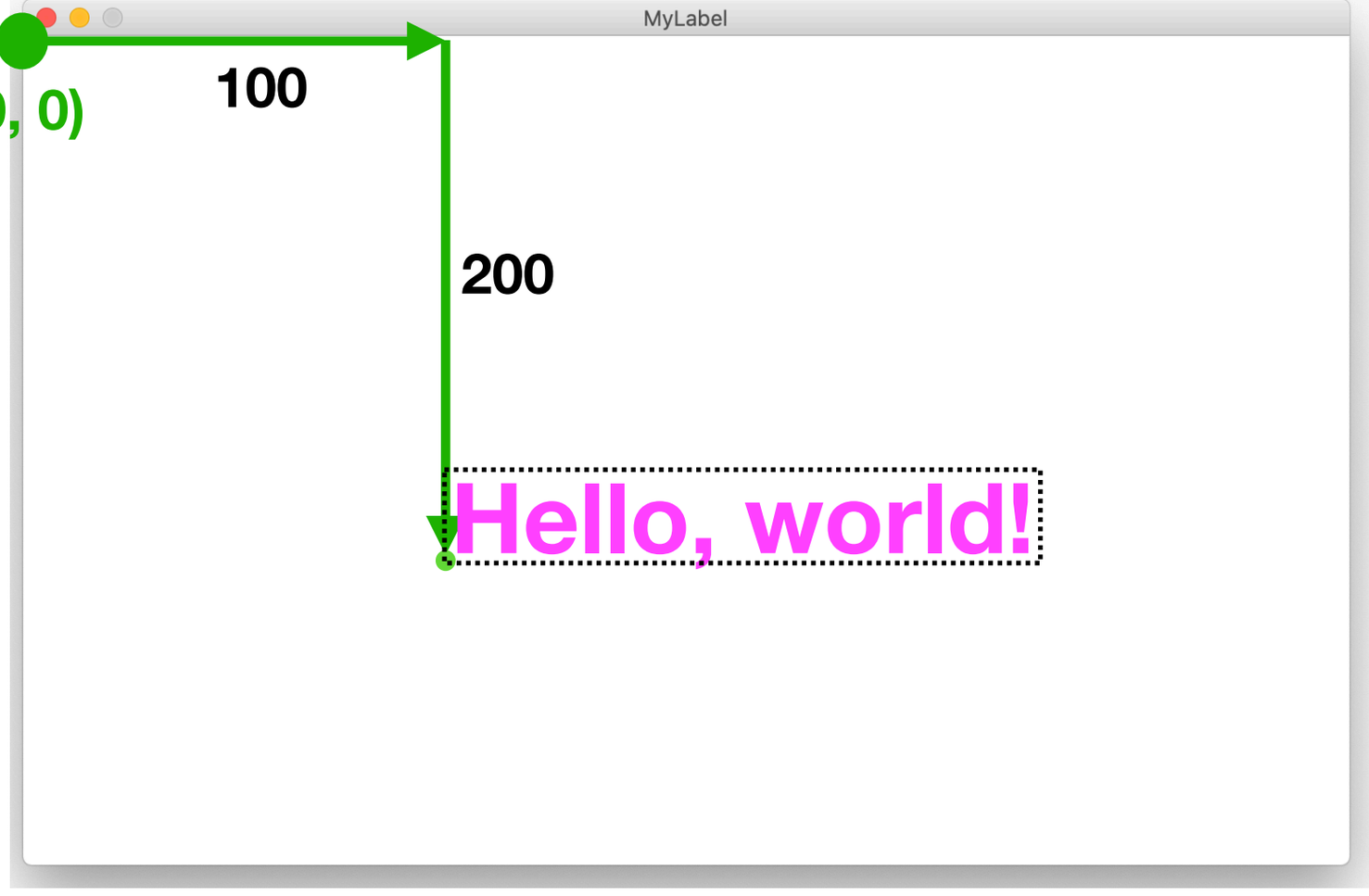

label

Hello, world!



Animation

```
def main():
    window = GWindow()
    rect = set_up_rect()
    window.add(rect, x=(window.width-SIZE)/2, y=(window.height-SIZE)/2)
    vx = 5
    while True:
        rect.move(vx, 0)
        if rect.x <= 0 or rect.x+rect.width >= window.width:
            vx = -vx
        pause(10)
```

```
def main():
    window = GWindow()
    rect = set_up_rect()
    window.add(rect, x=(window.width-SIZE)/2, y=(window.height-SIZE)/2)
    vx = 5
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            vx = -vx
        pause(10)
```

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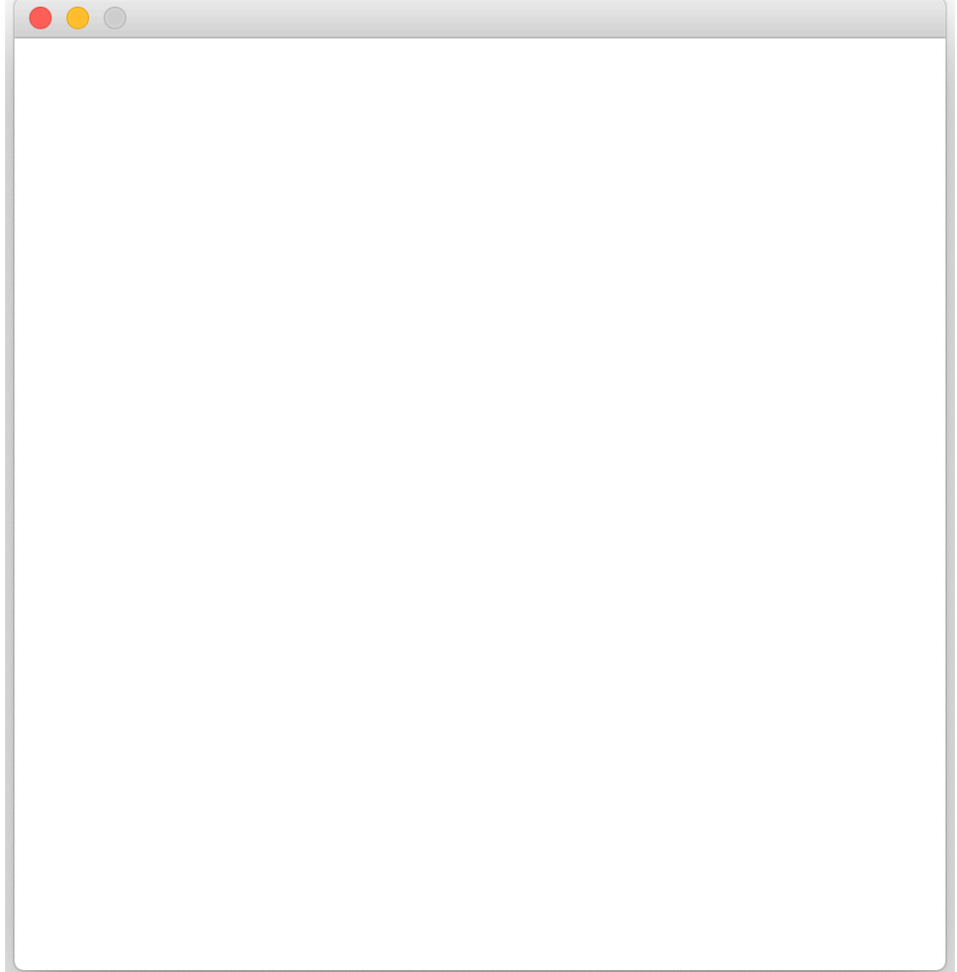
    vx = 5
    while True:
        rect.move(vx, 0)
        if rect.x <= 0 or rect.x+rect.width >= window.width:
            vx = -vx
        pause(10)
```



```
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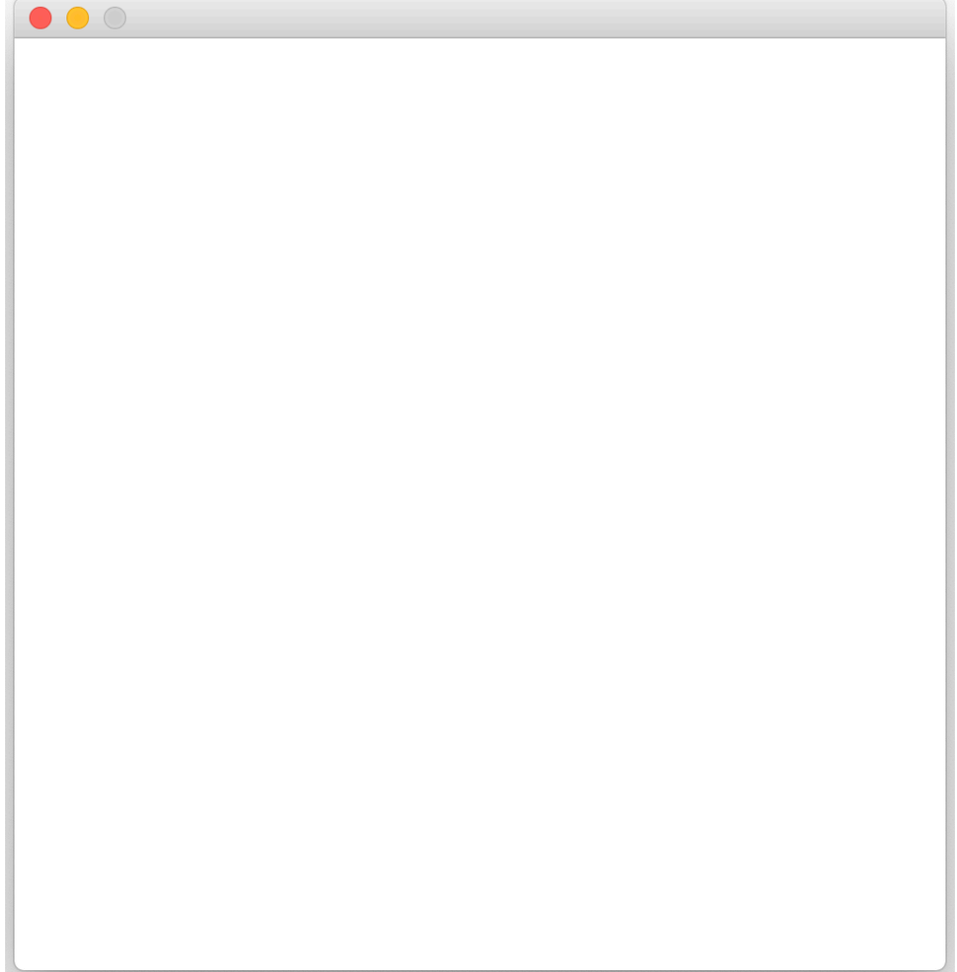

```
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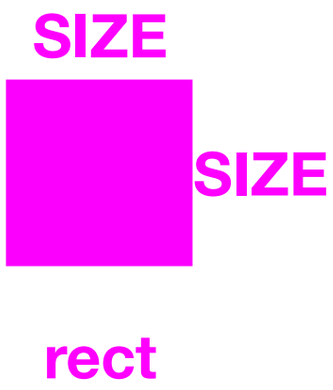

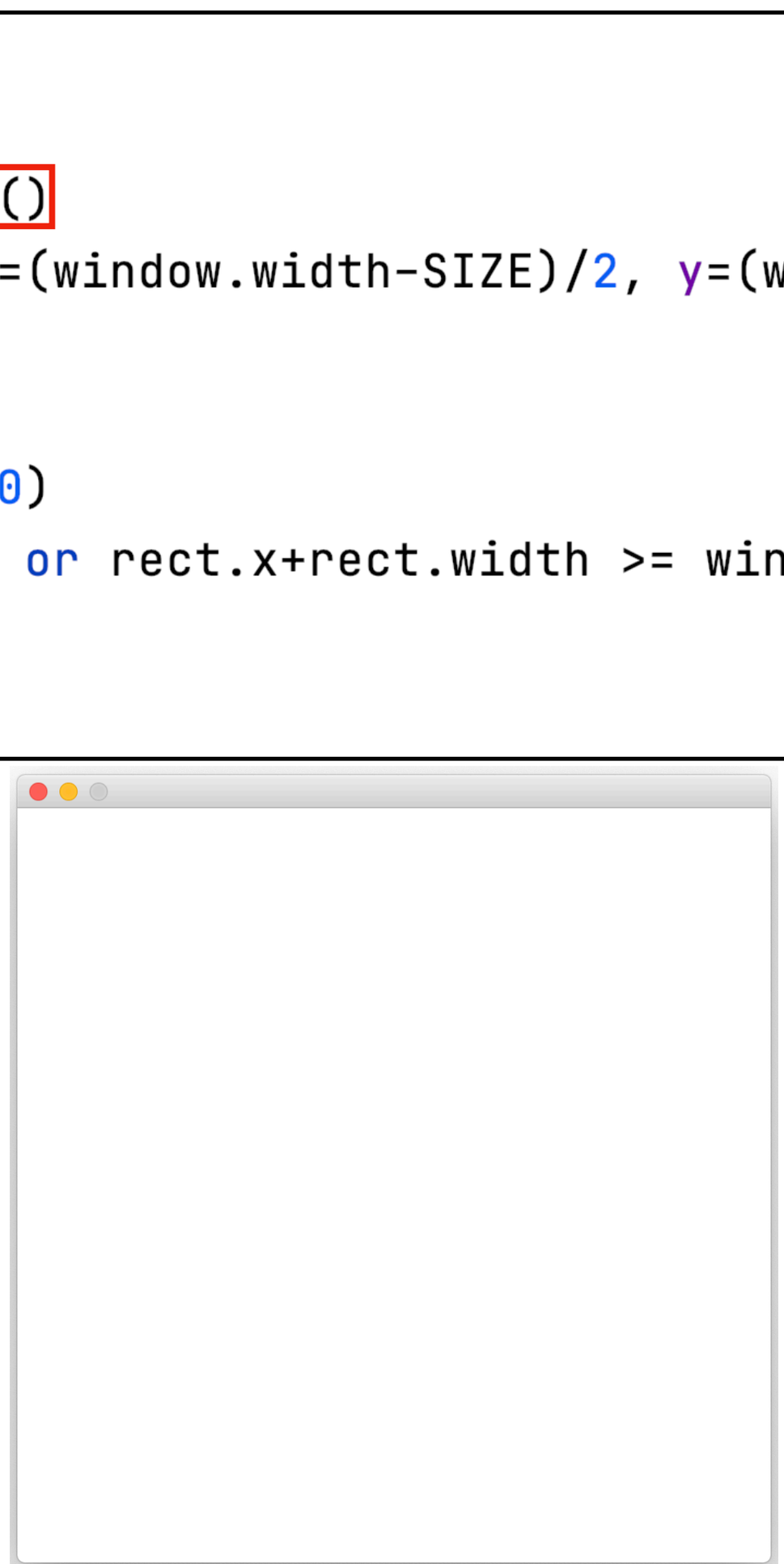

```
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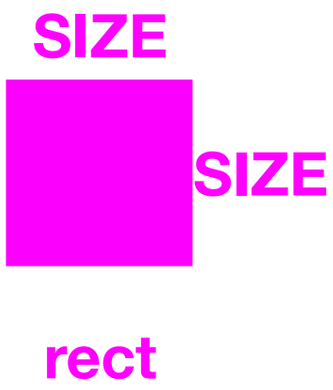

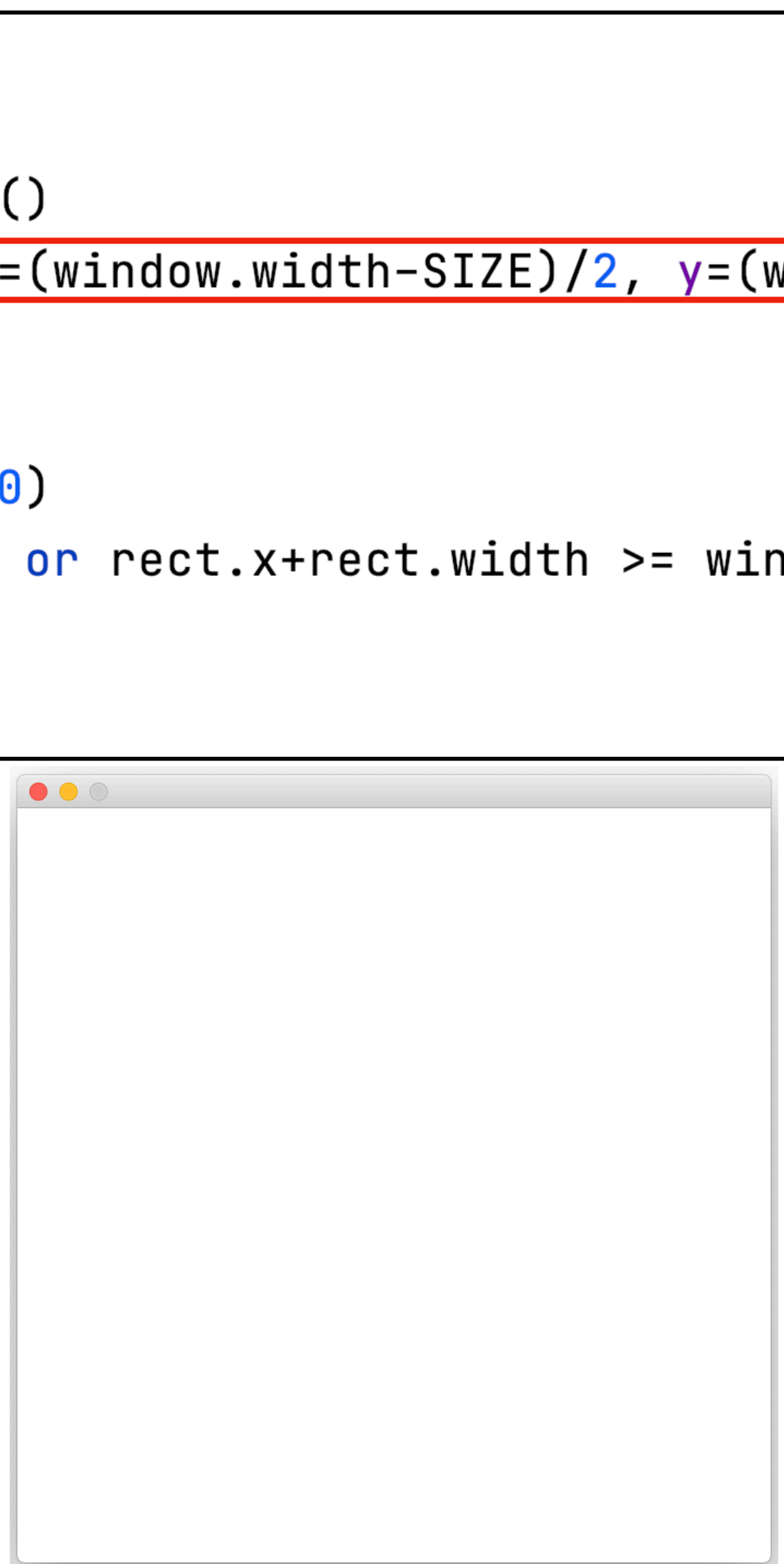

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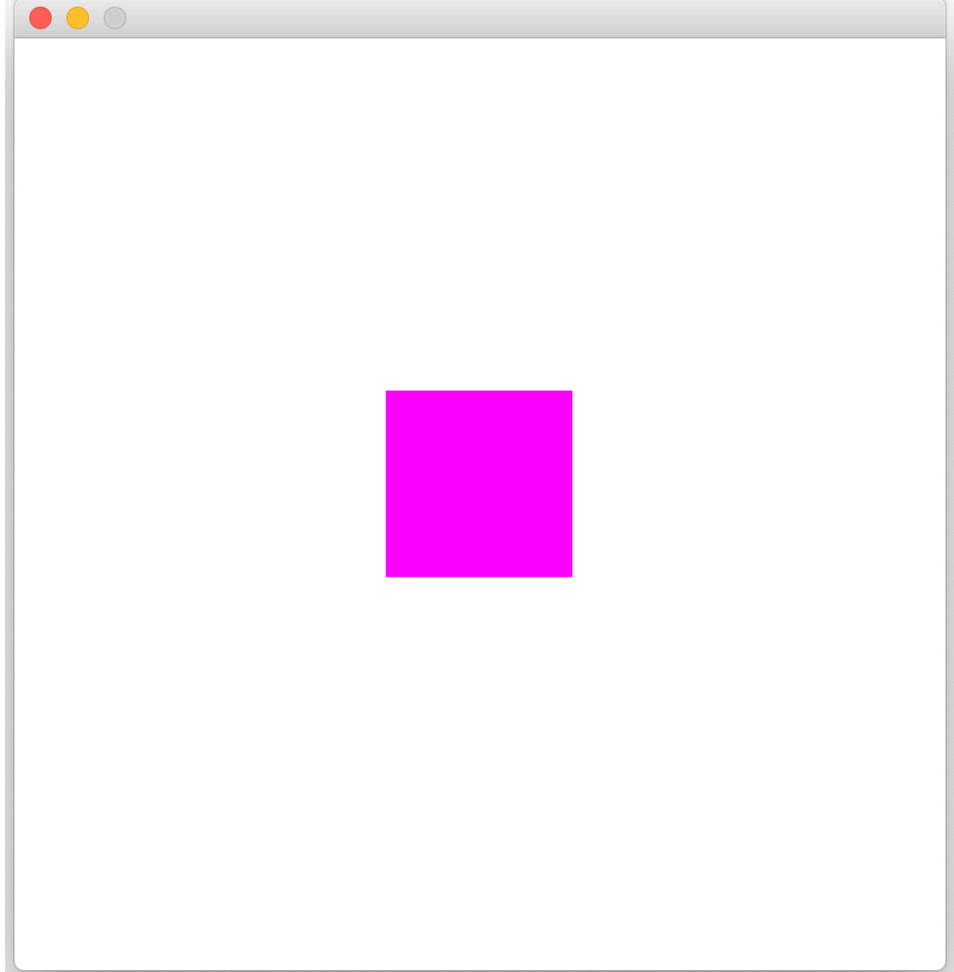

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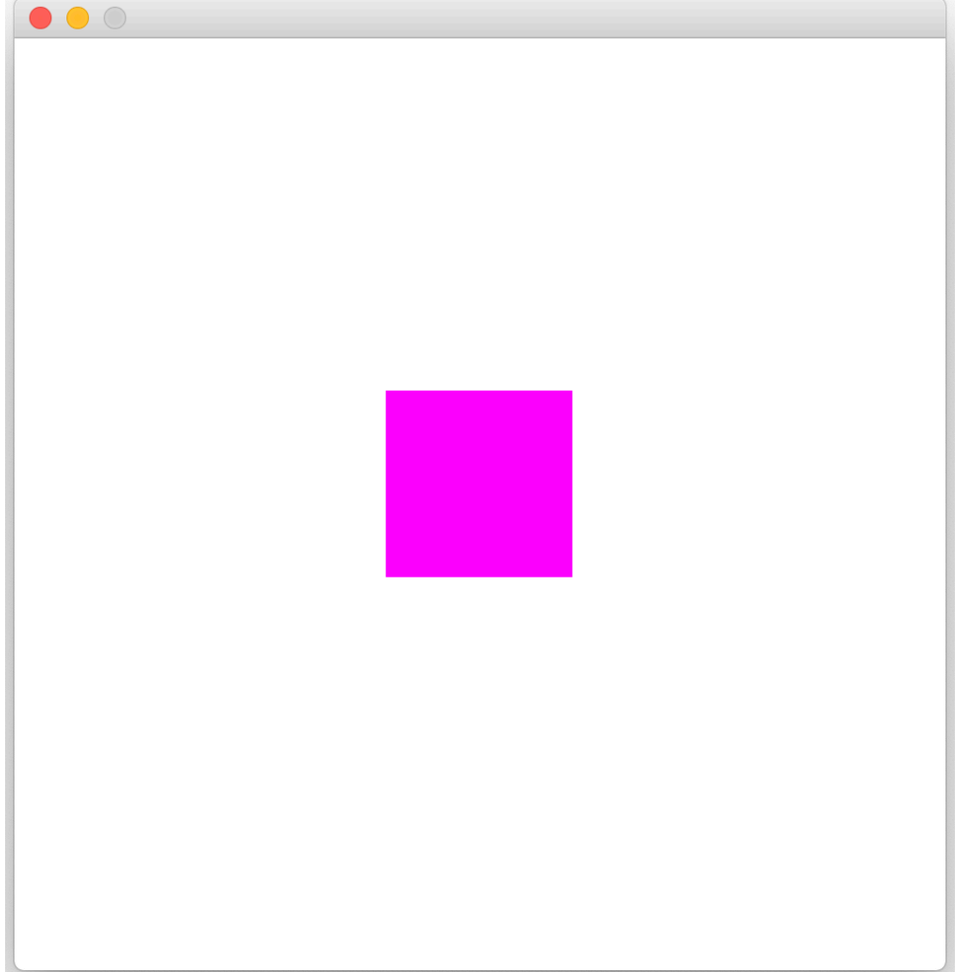

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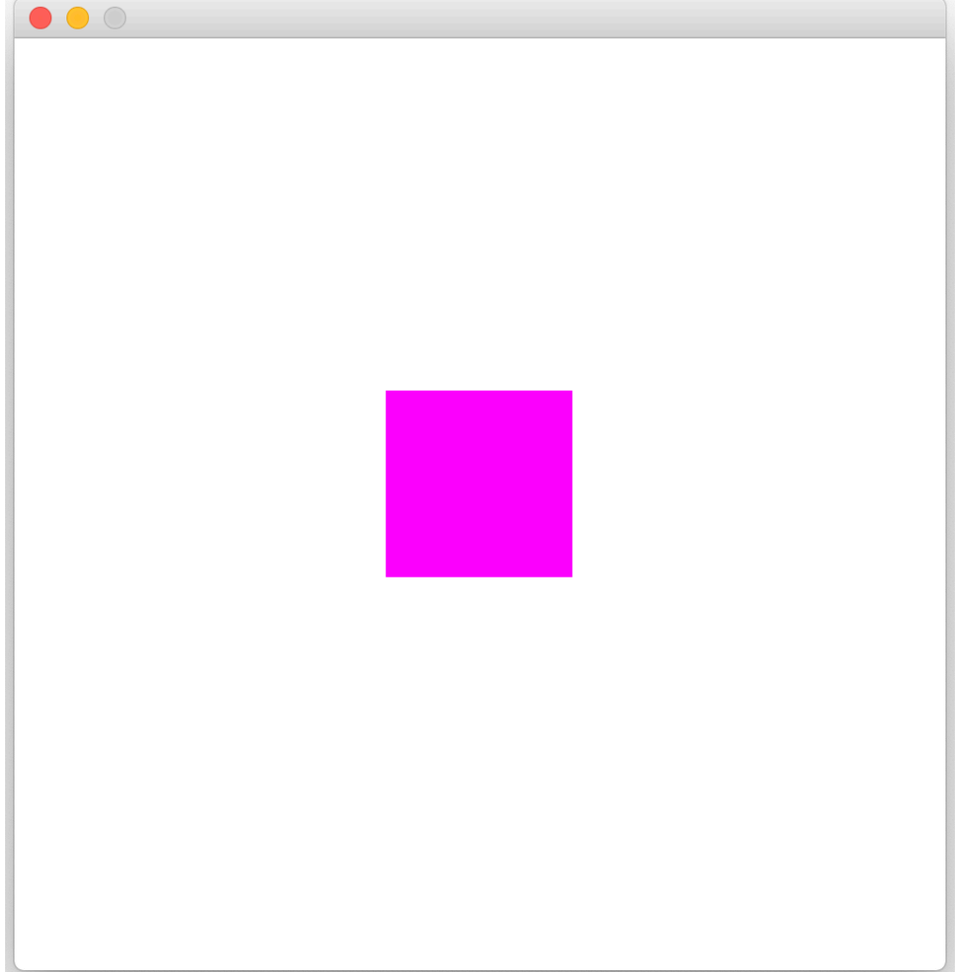

```
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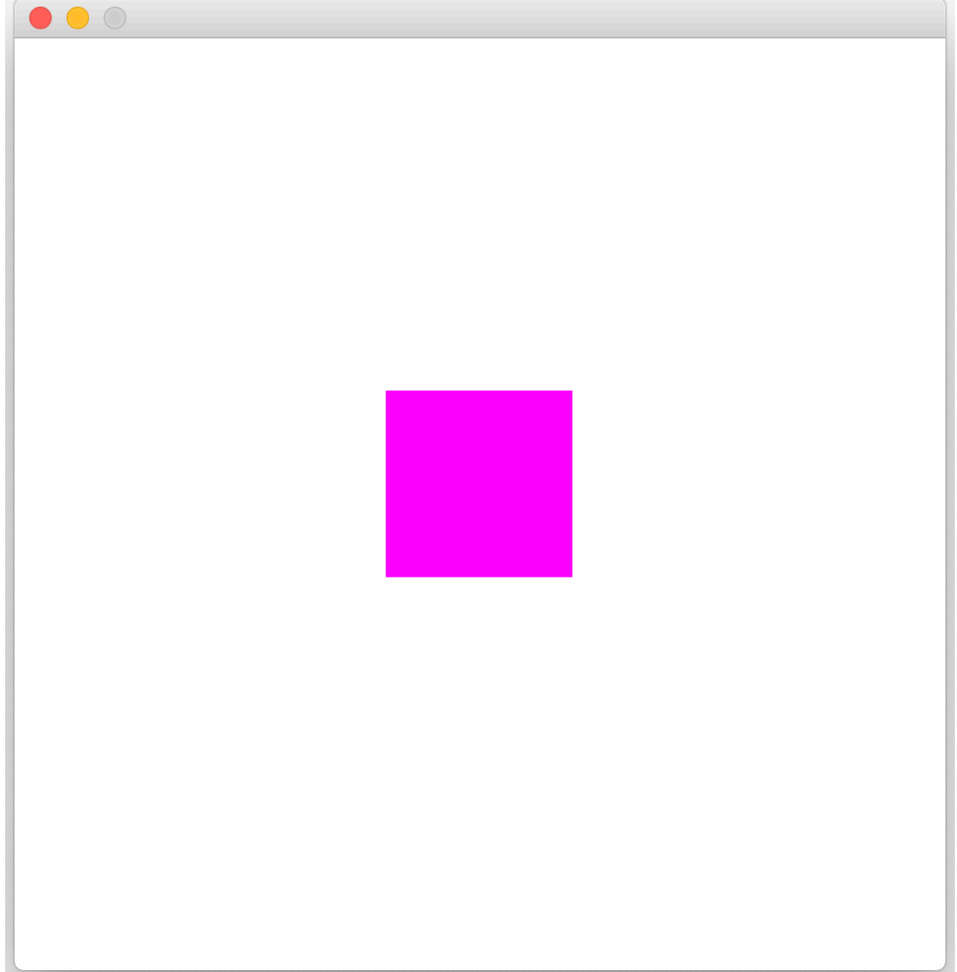

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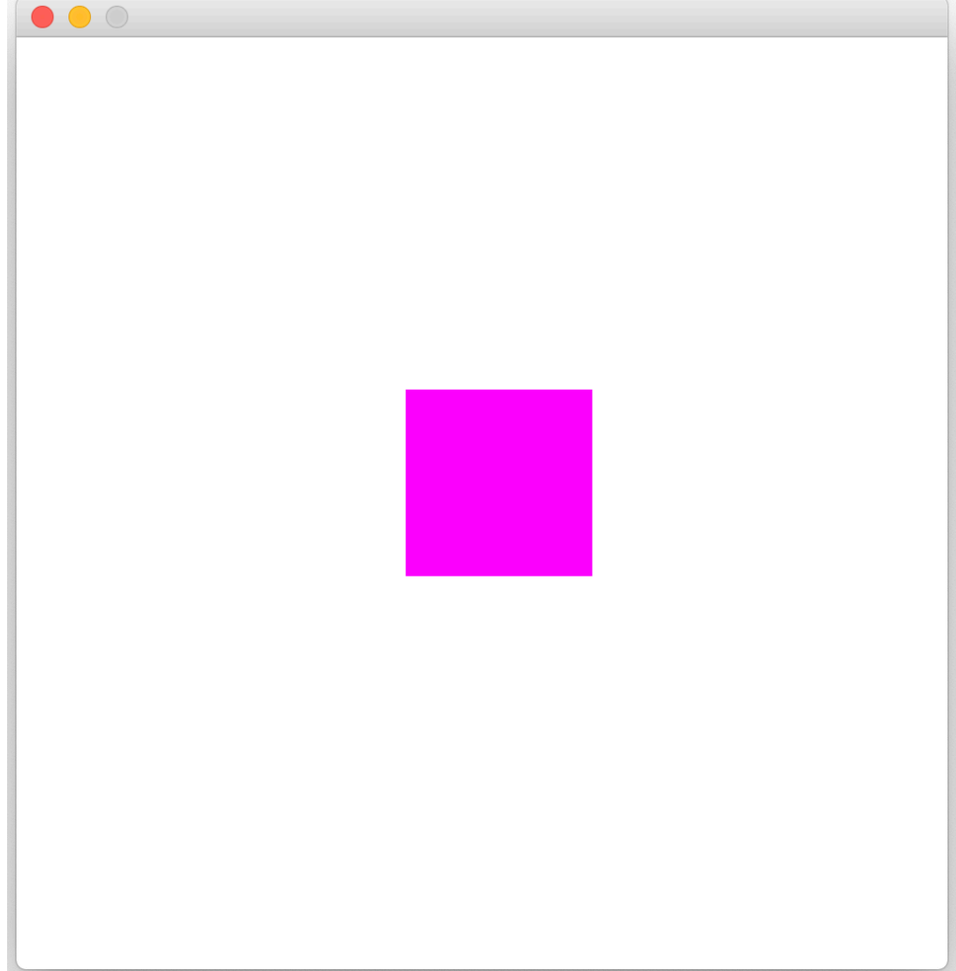

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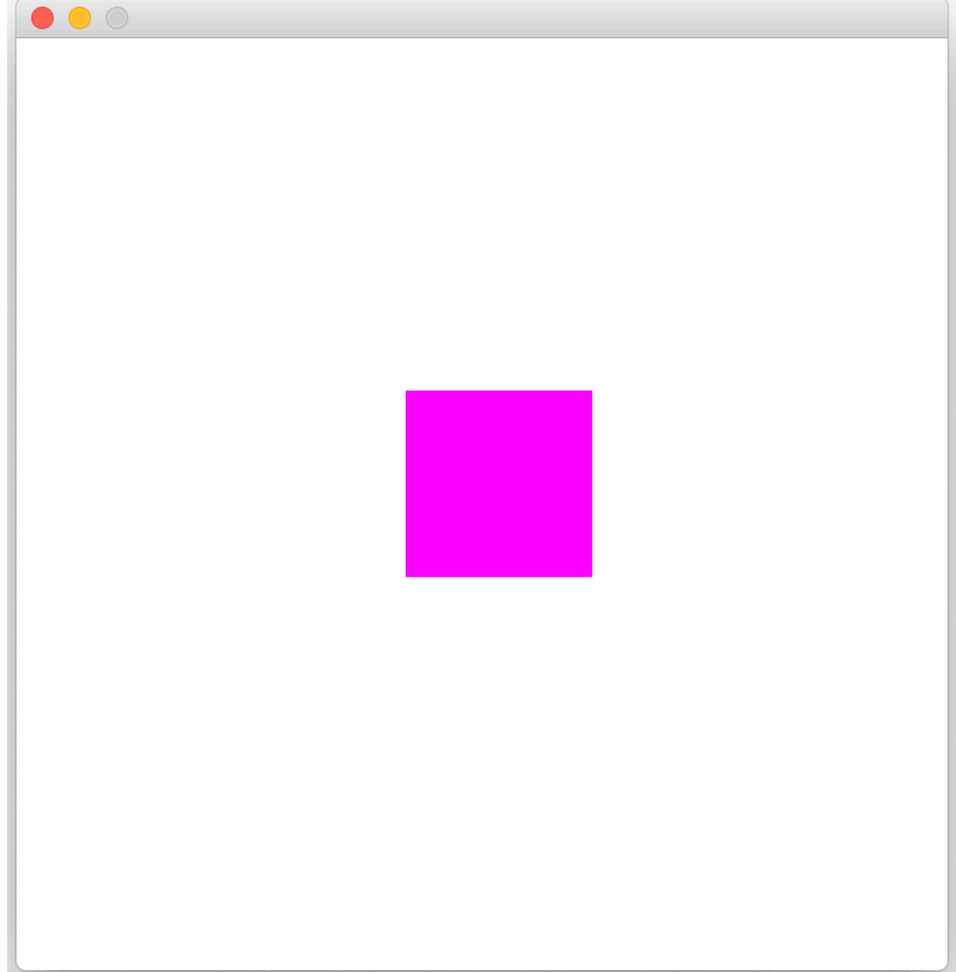

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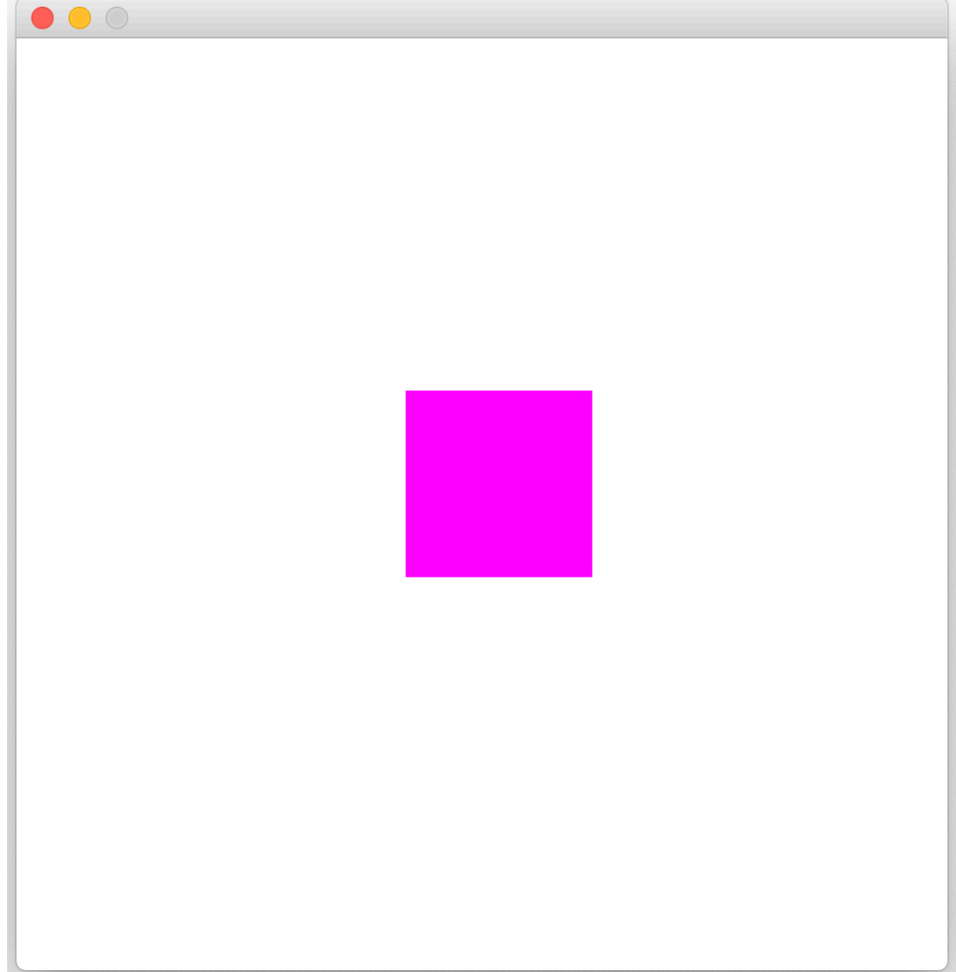

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    window = GWindow()
    rect = set_up_rect()
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    vx = 5
    while True:
        rect.move(vx, 0)
        if rect.x <= 0 or rect.x+rect.width >= window.width:
            vx = -vx
        pause(10)
```
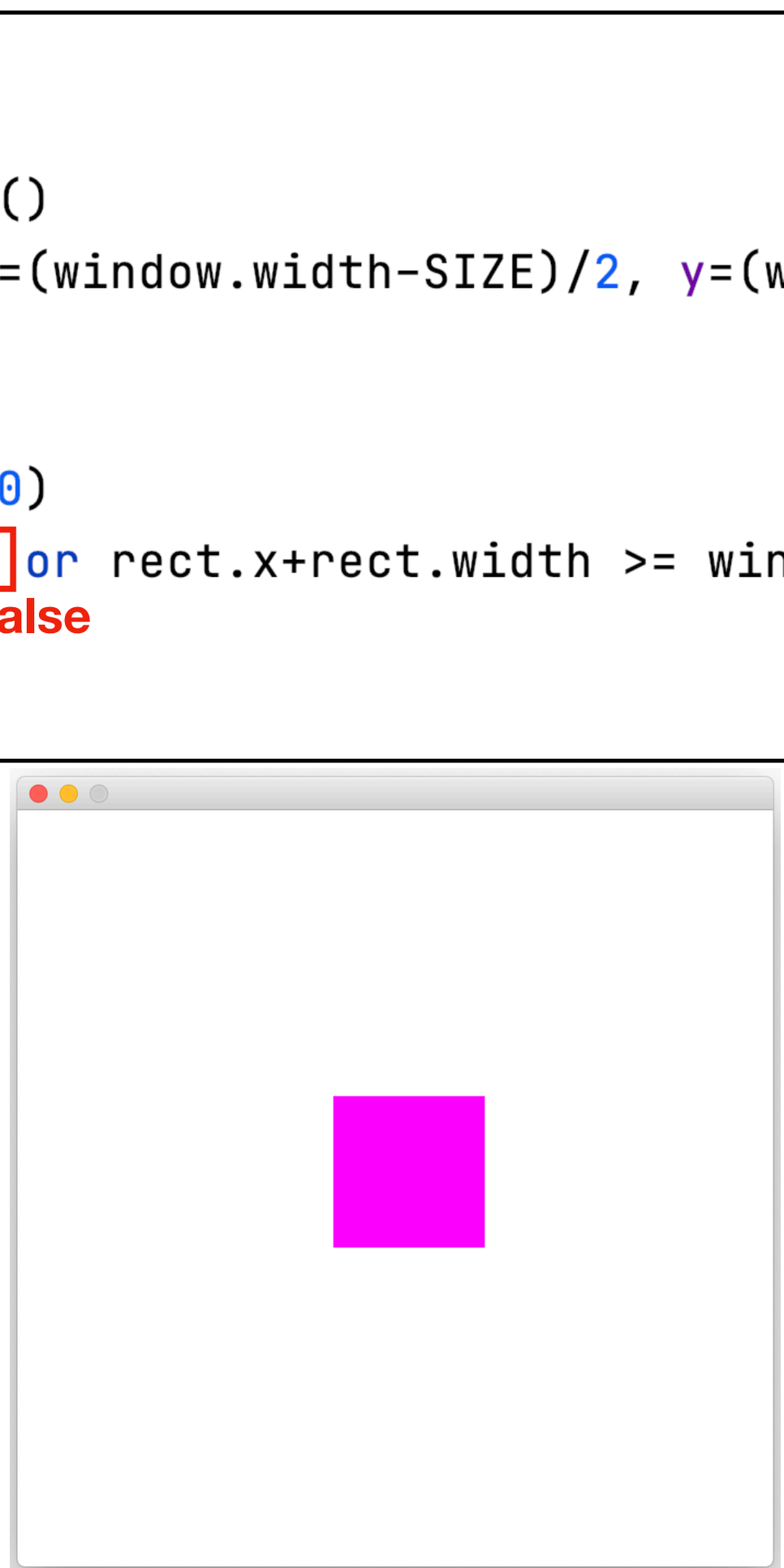

False



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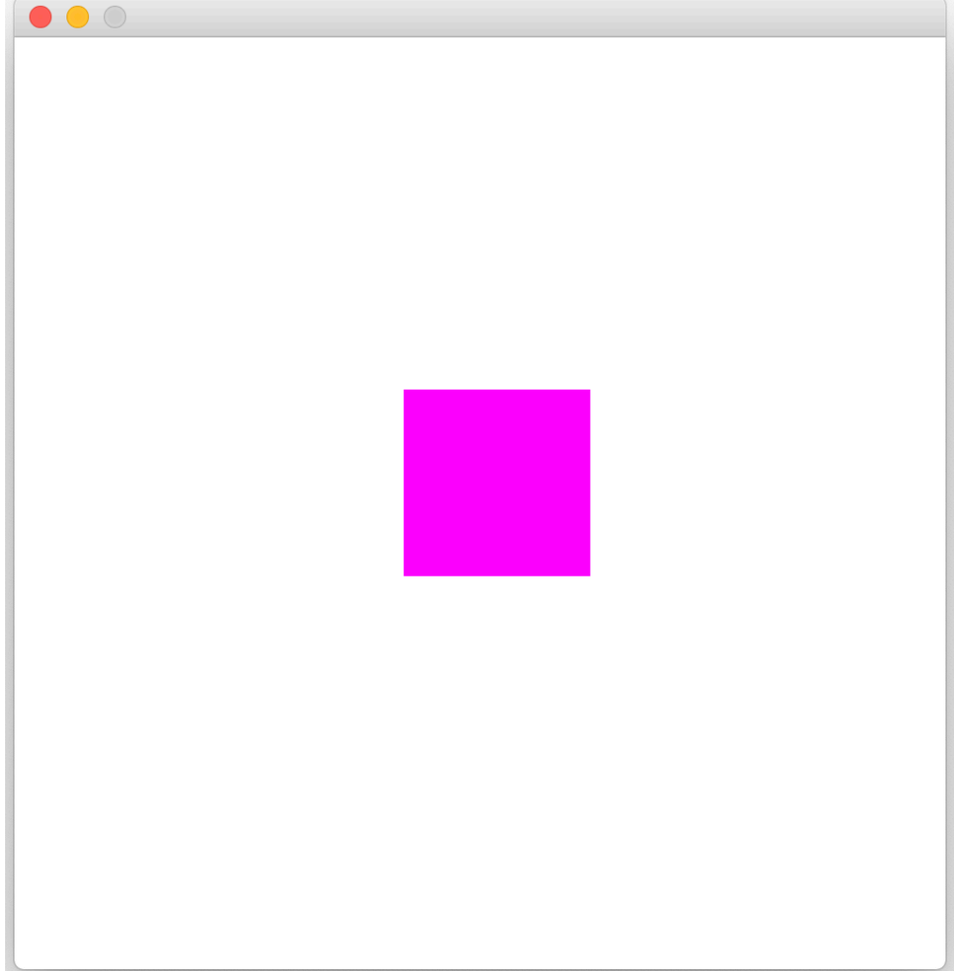
False



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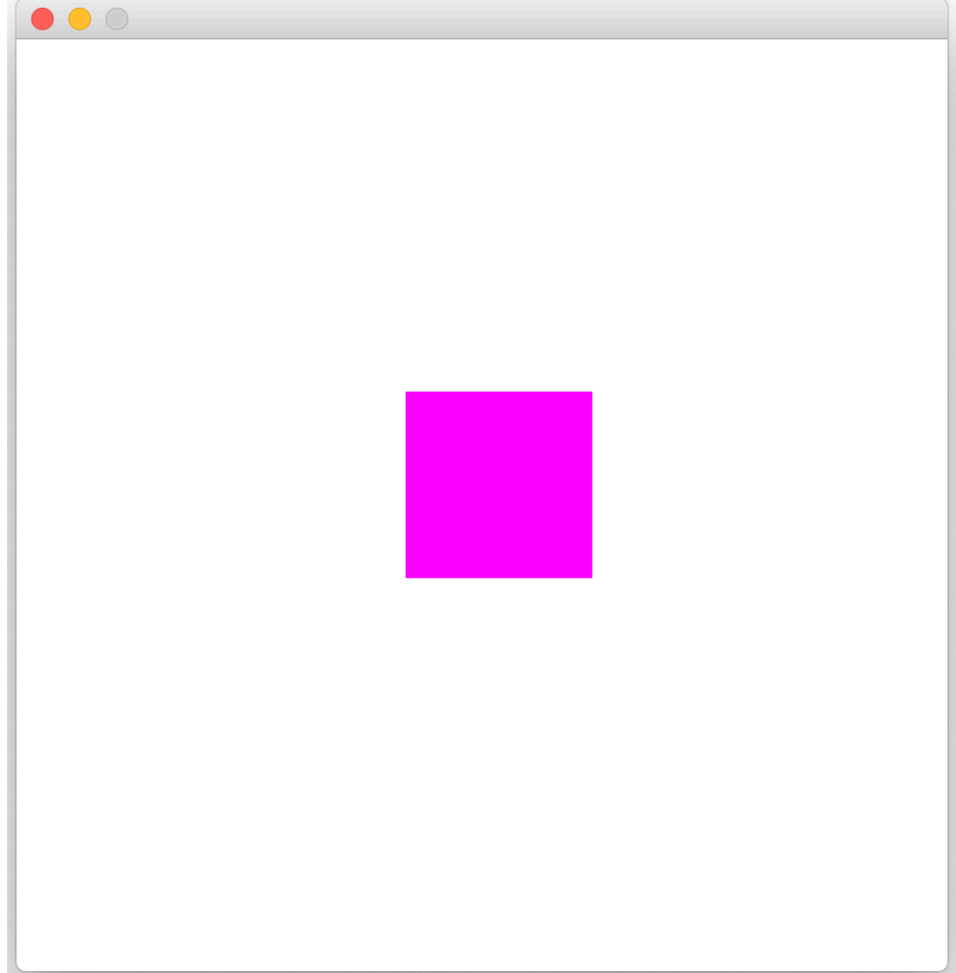
False

False



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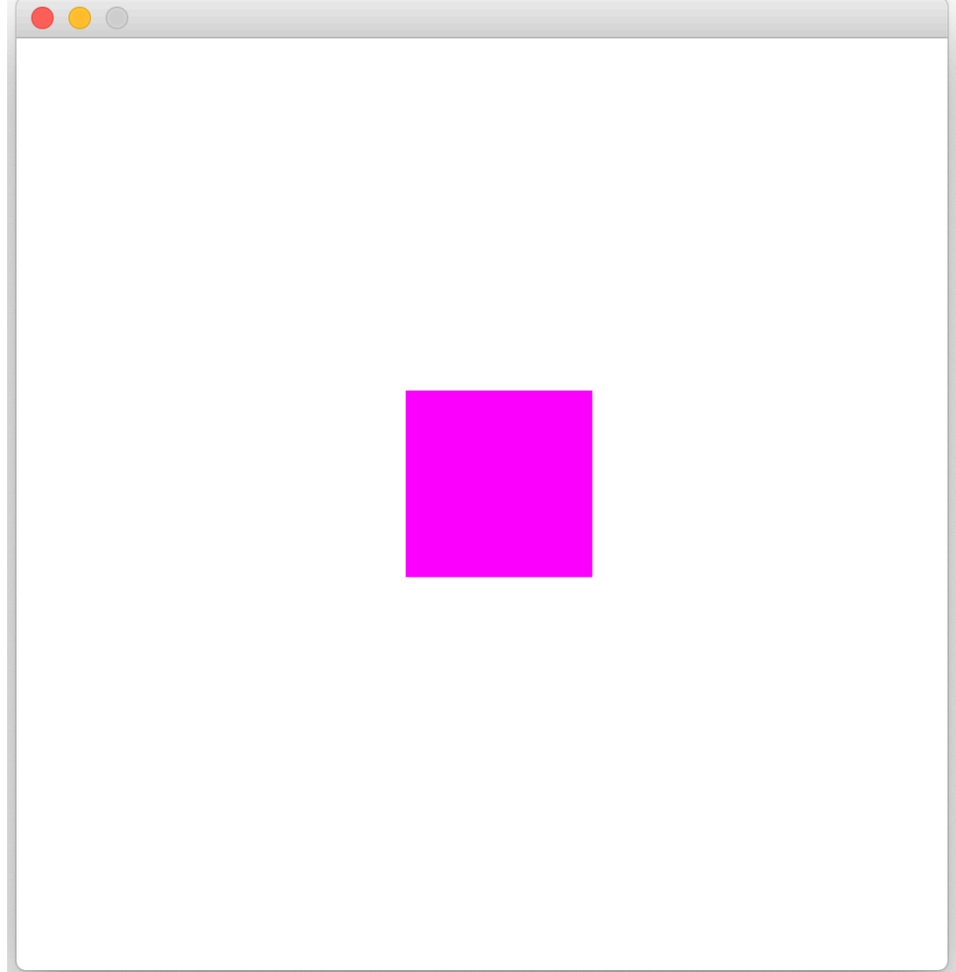

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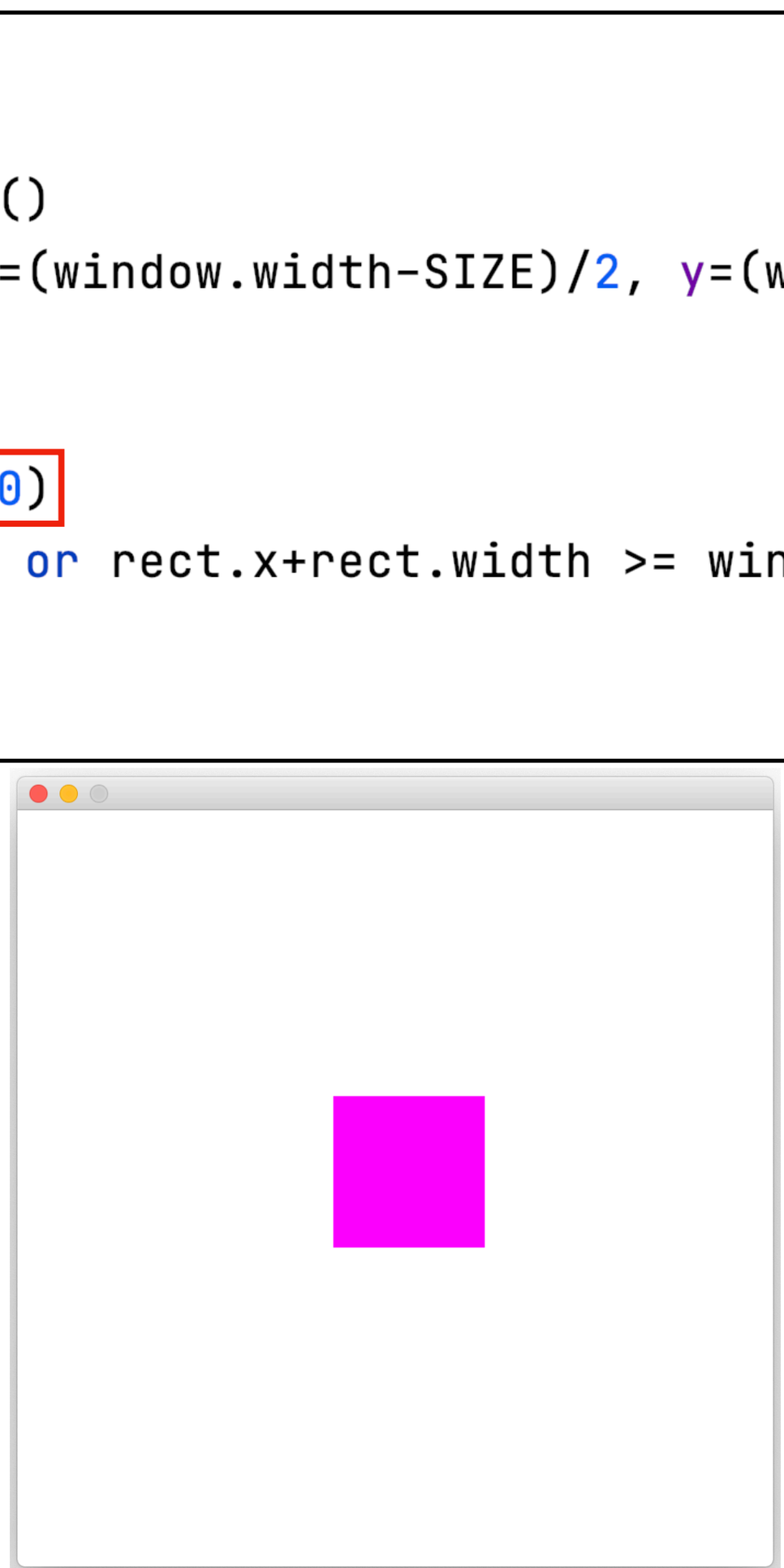

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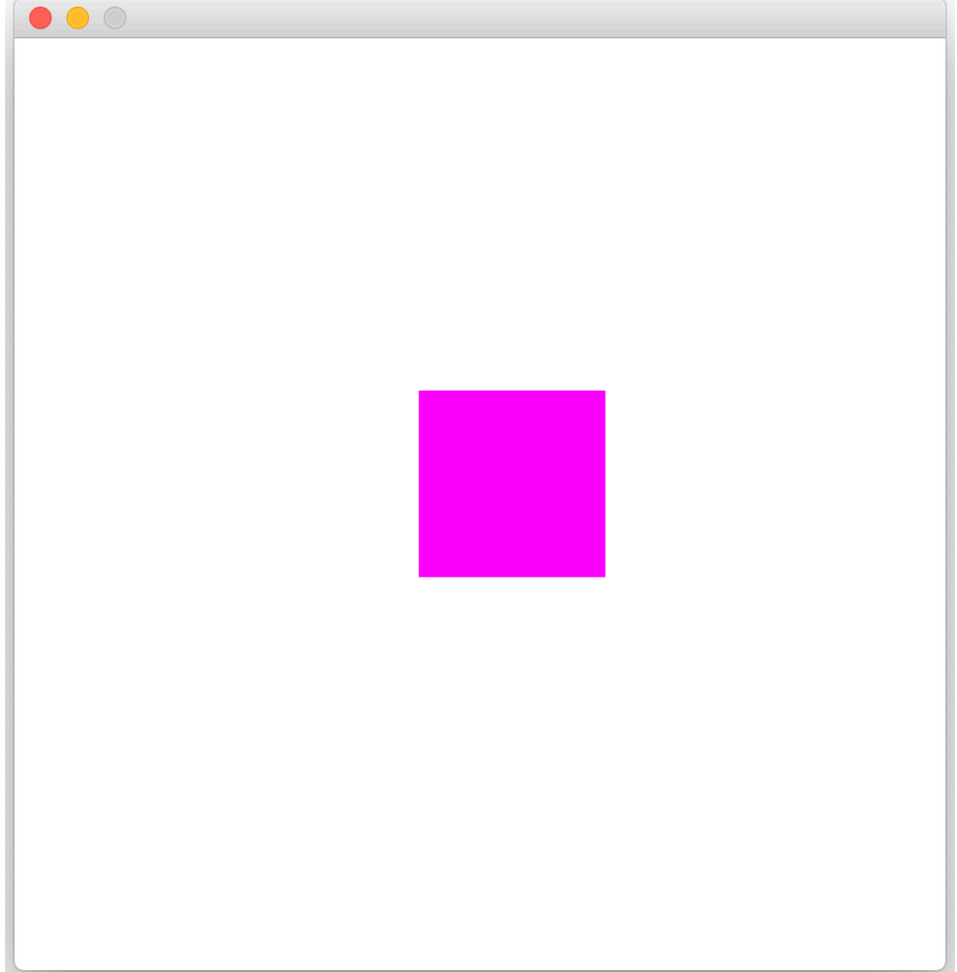

```
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        rect.move(vx, 0)
        if rect.x <= 0 or rect.x+rect.width >= window.width:
            vx = -vx
        pause(10)
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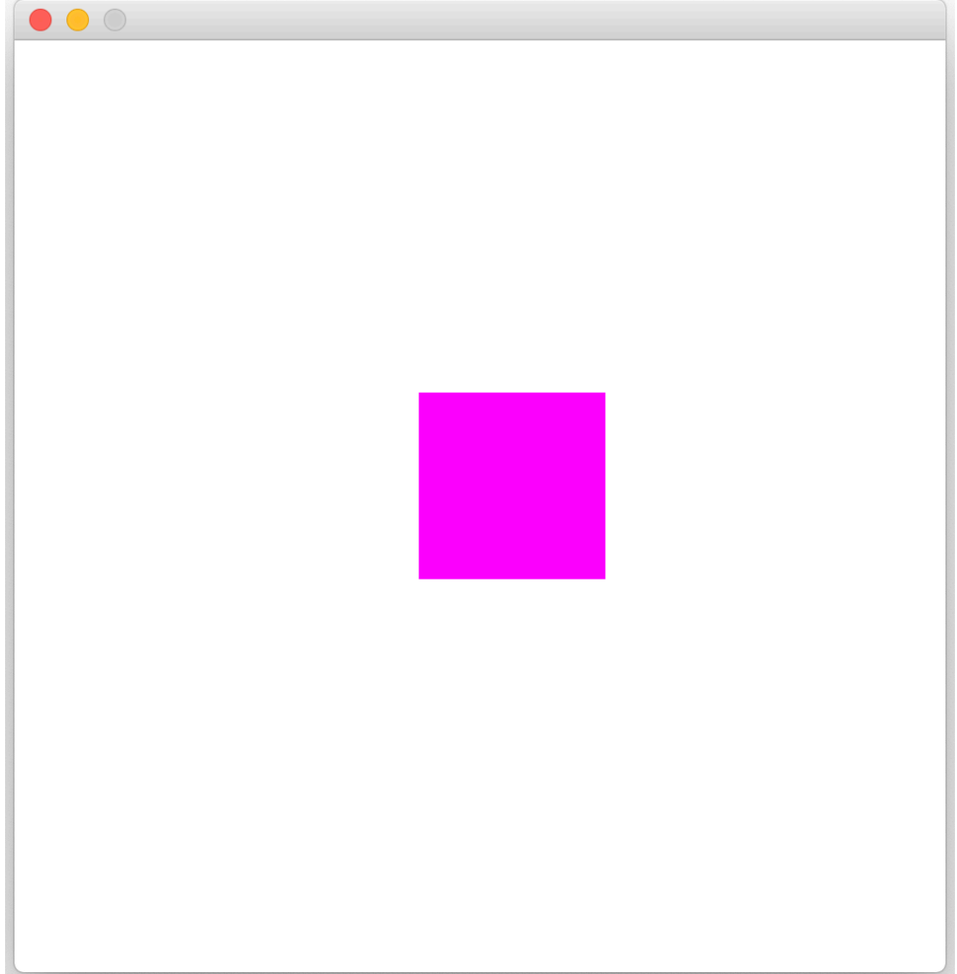

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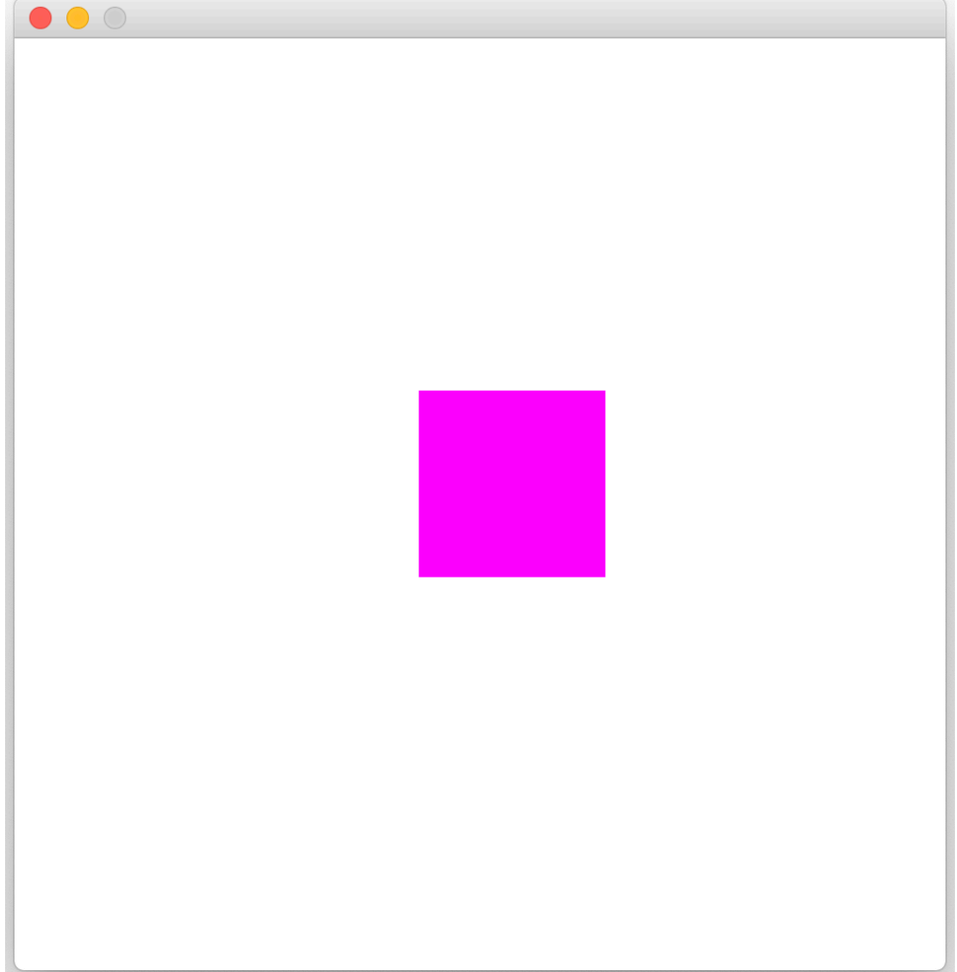

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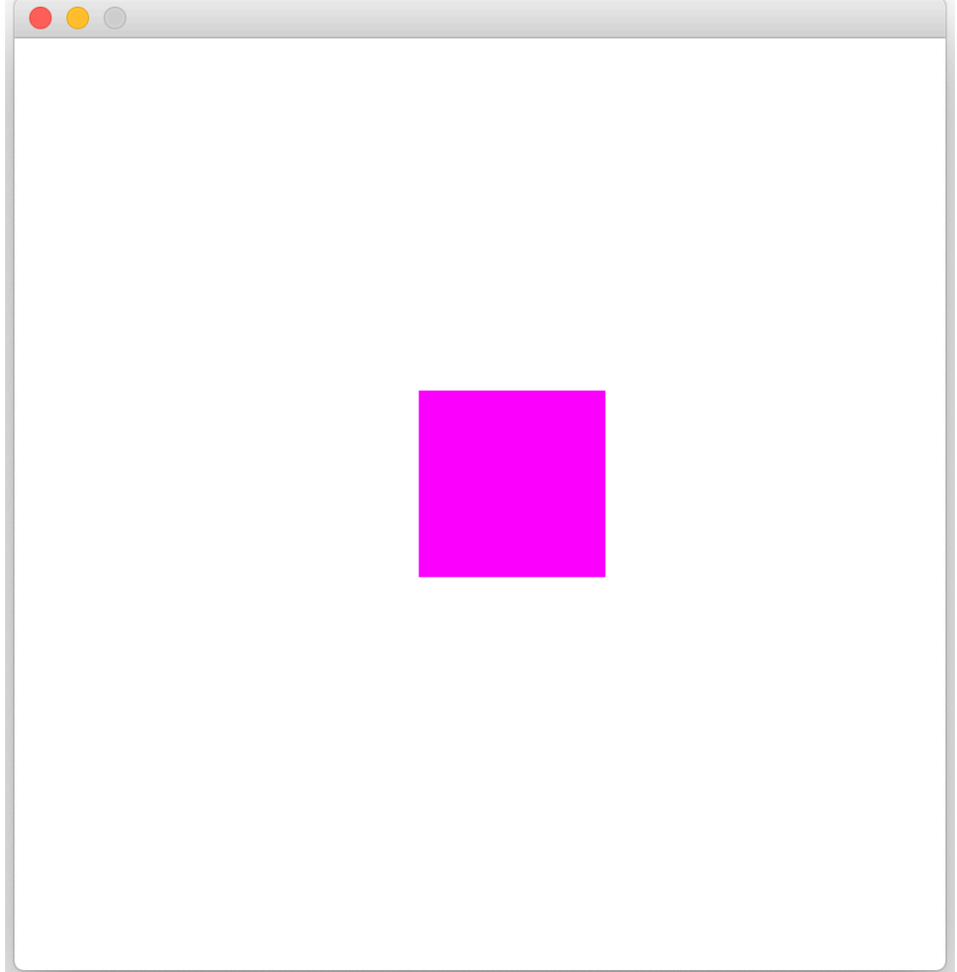

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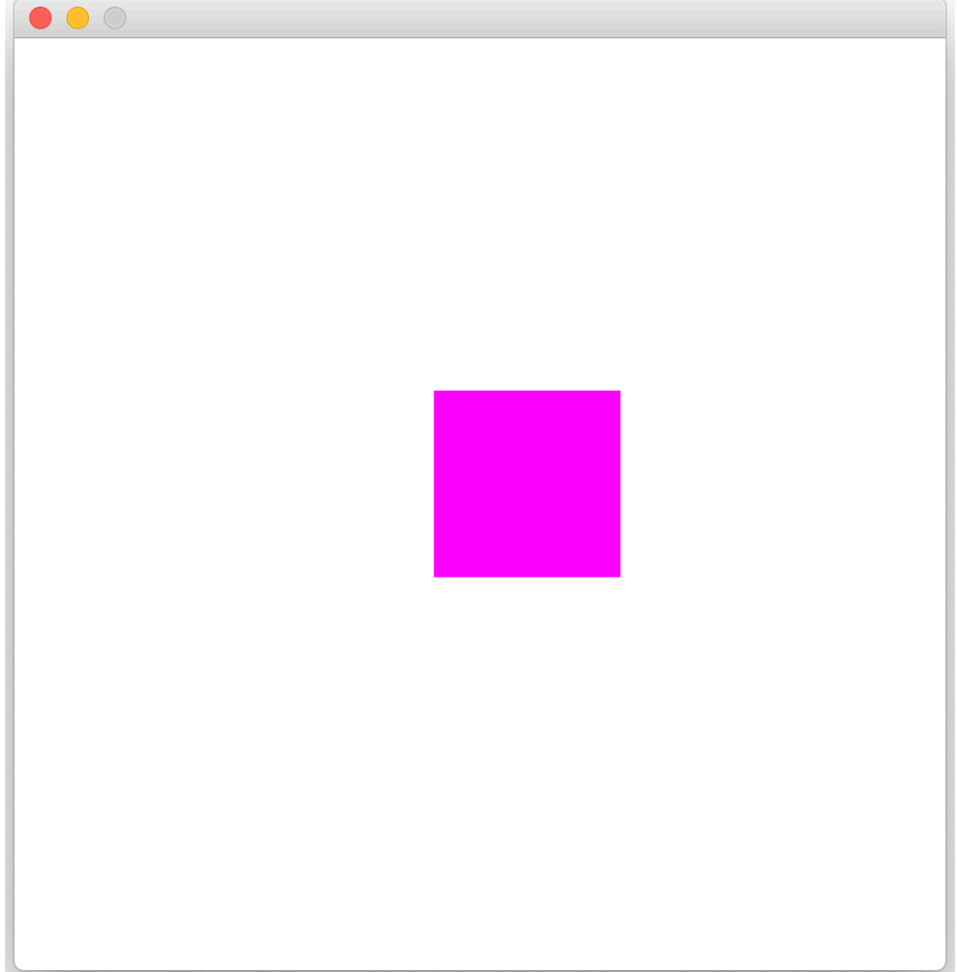

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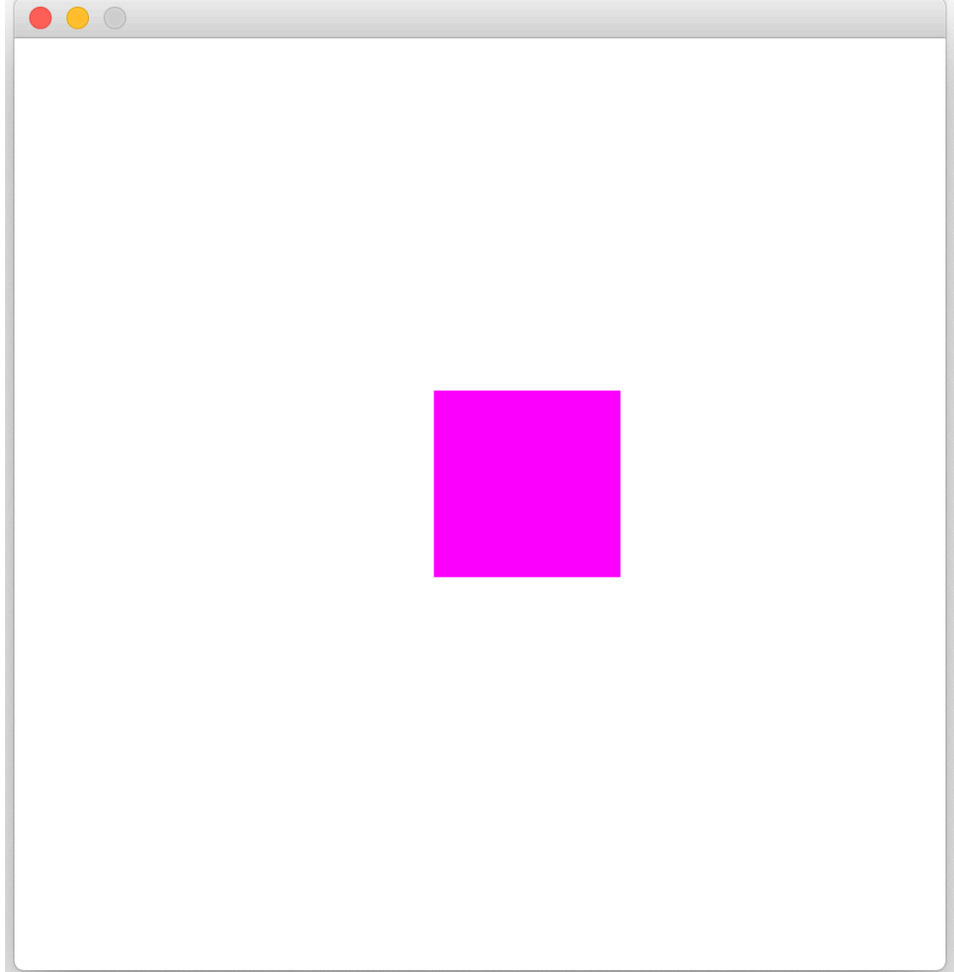

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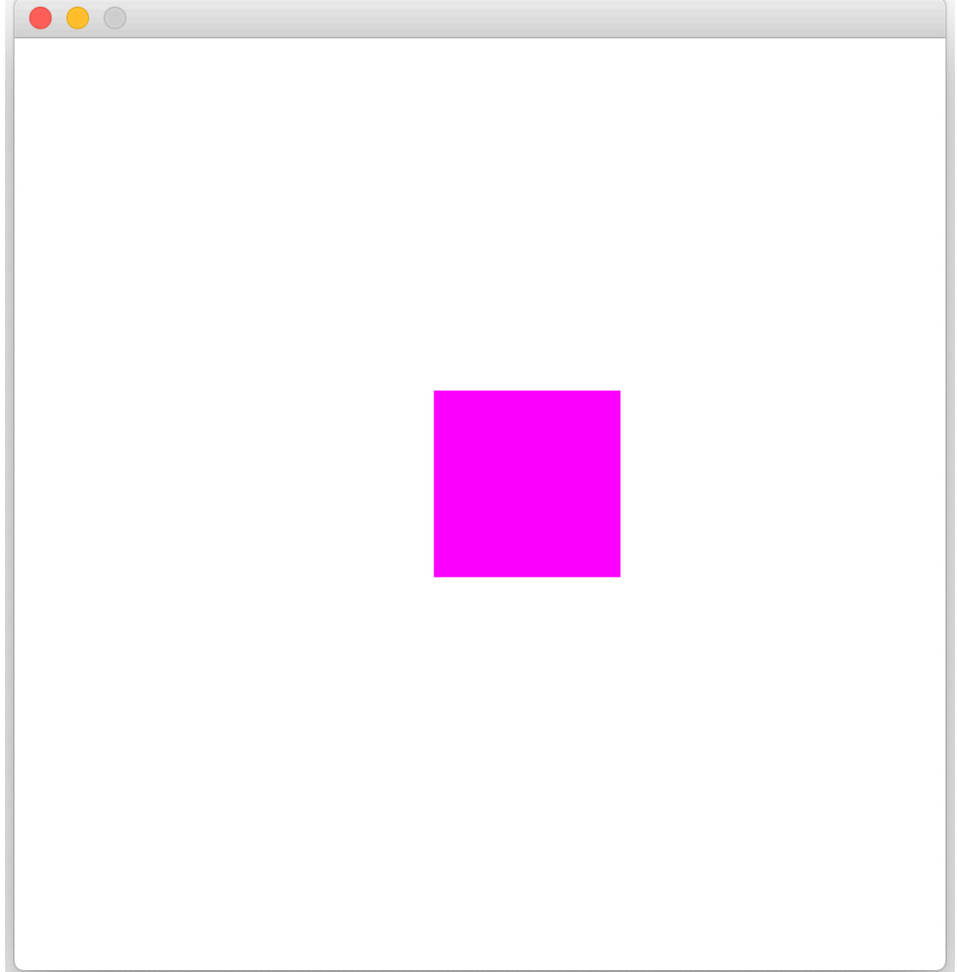

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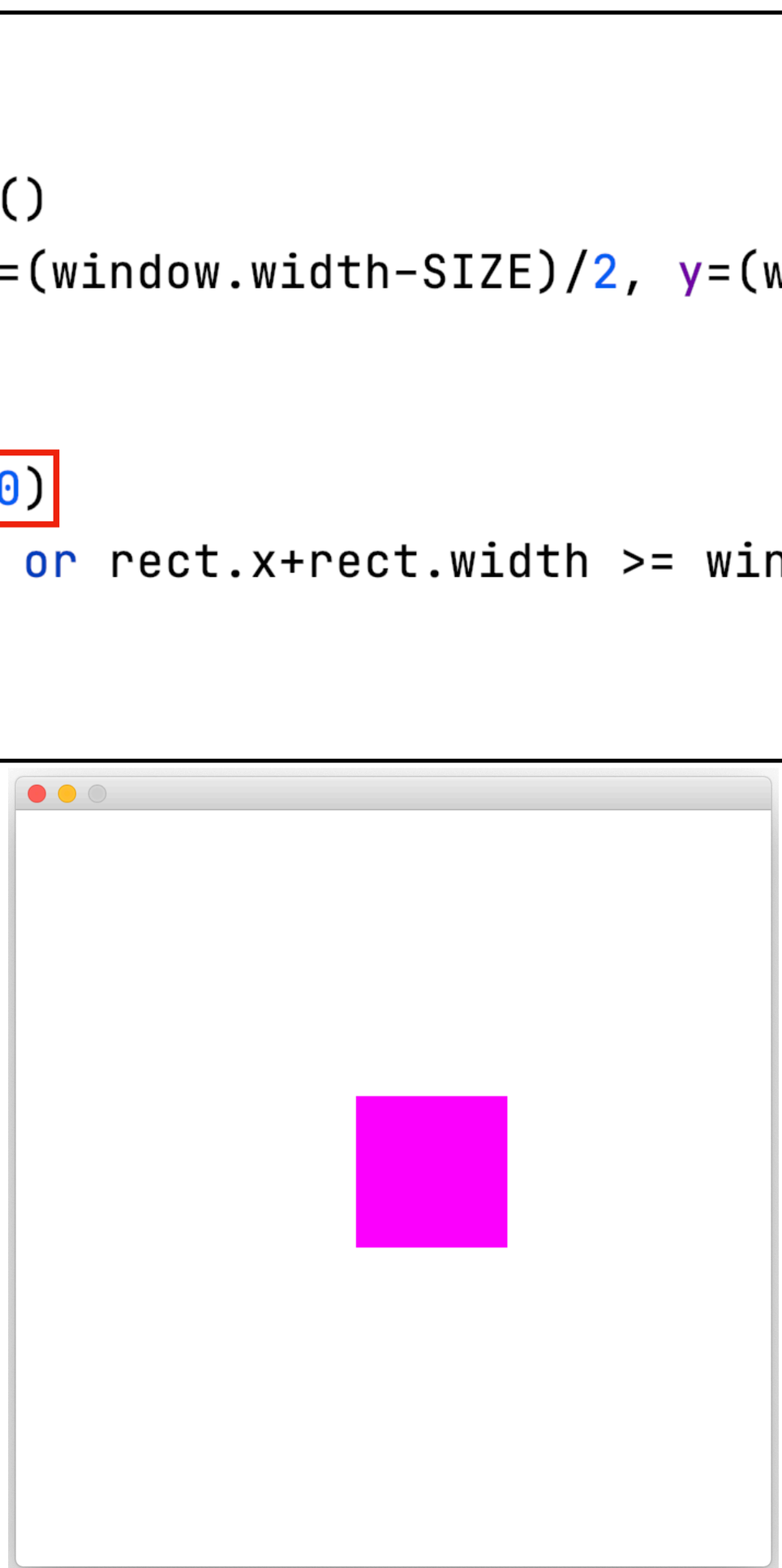

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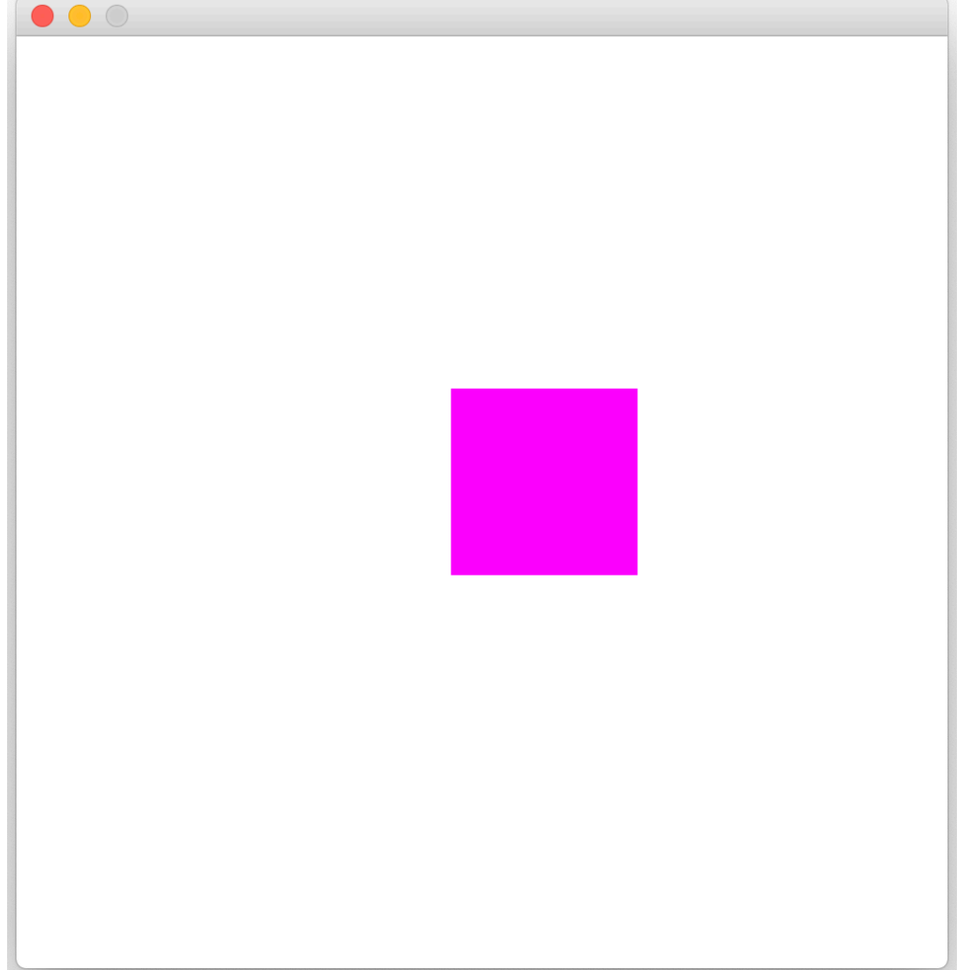

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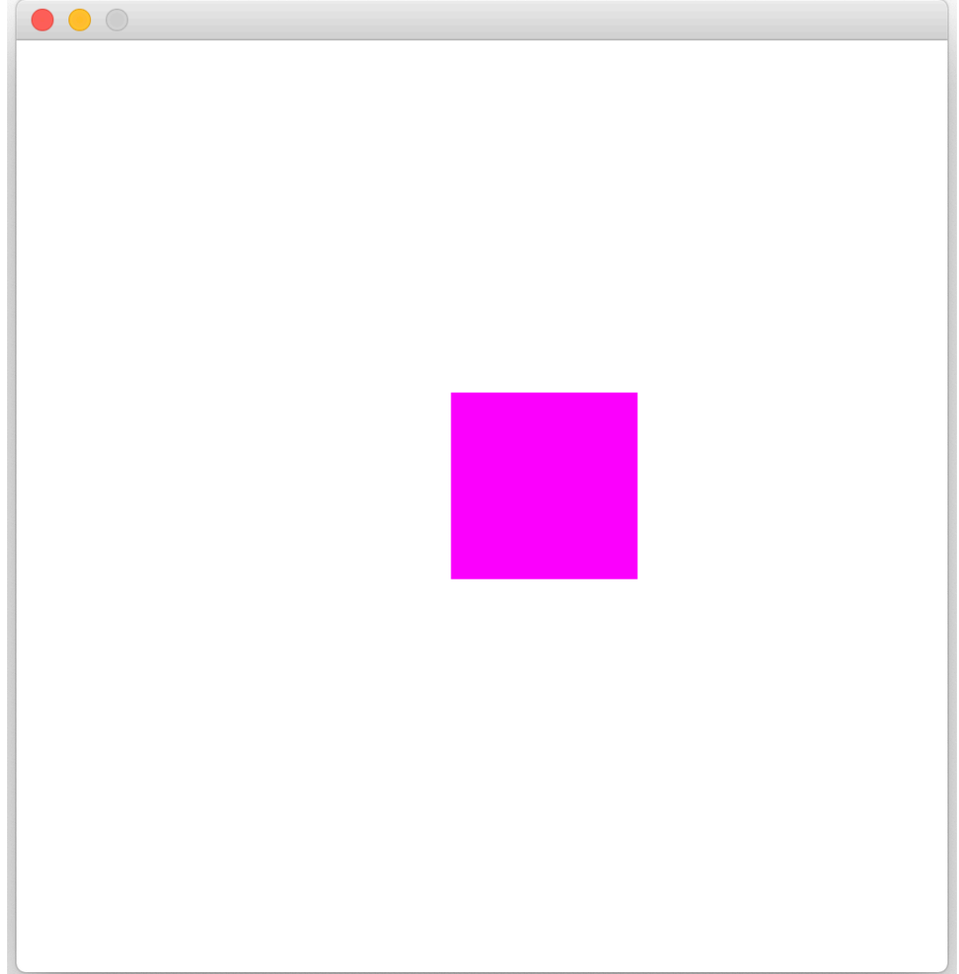

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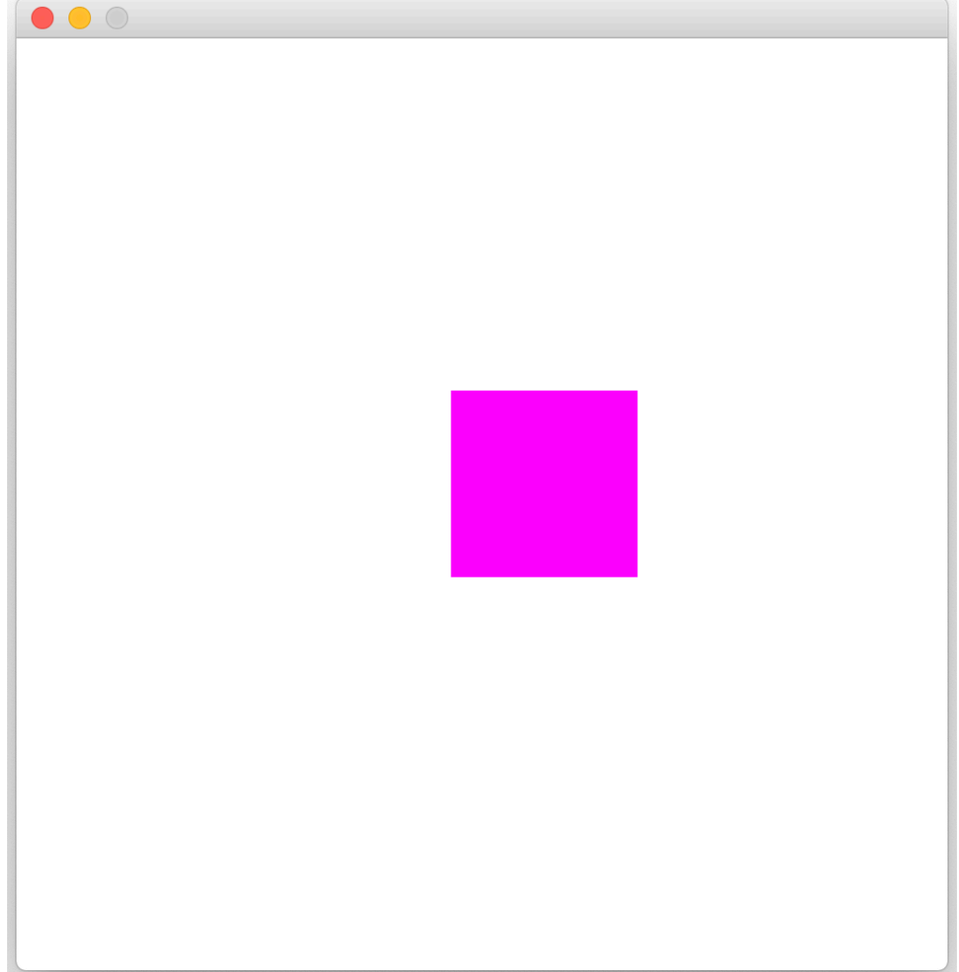

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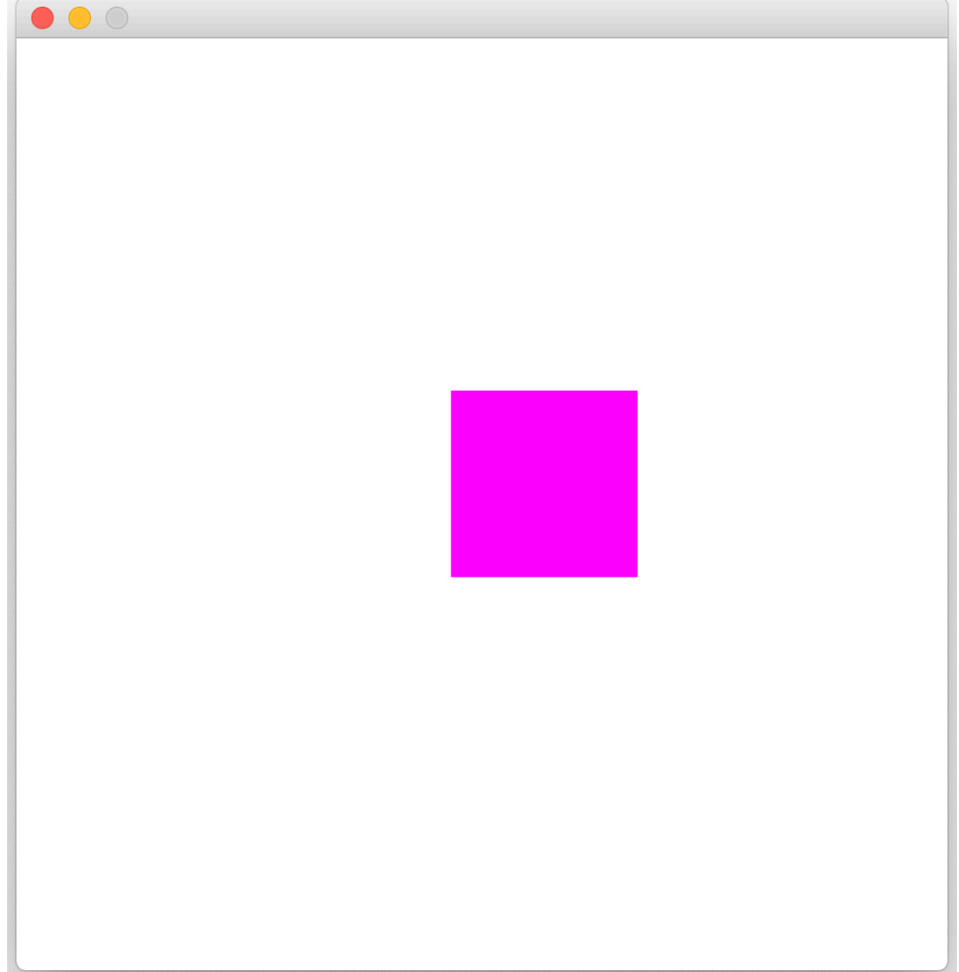

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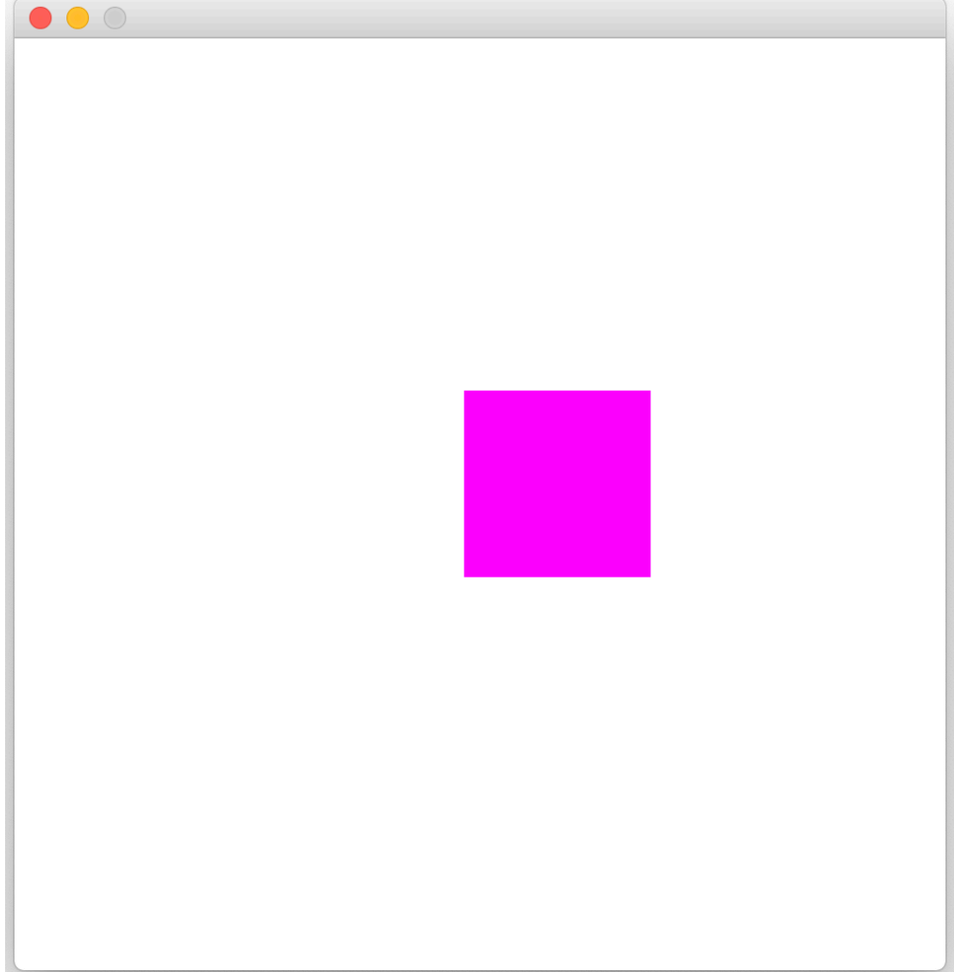

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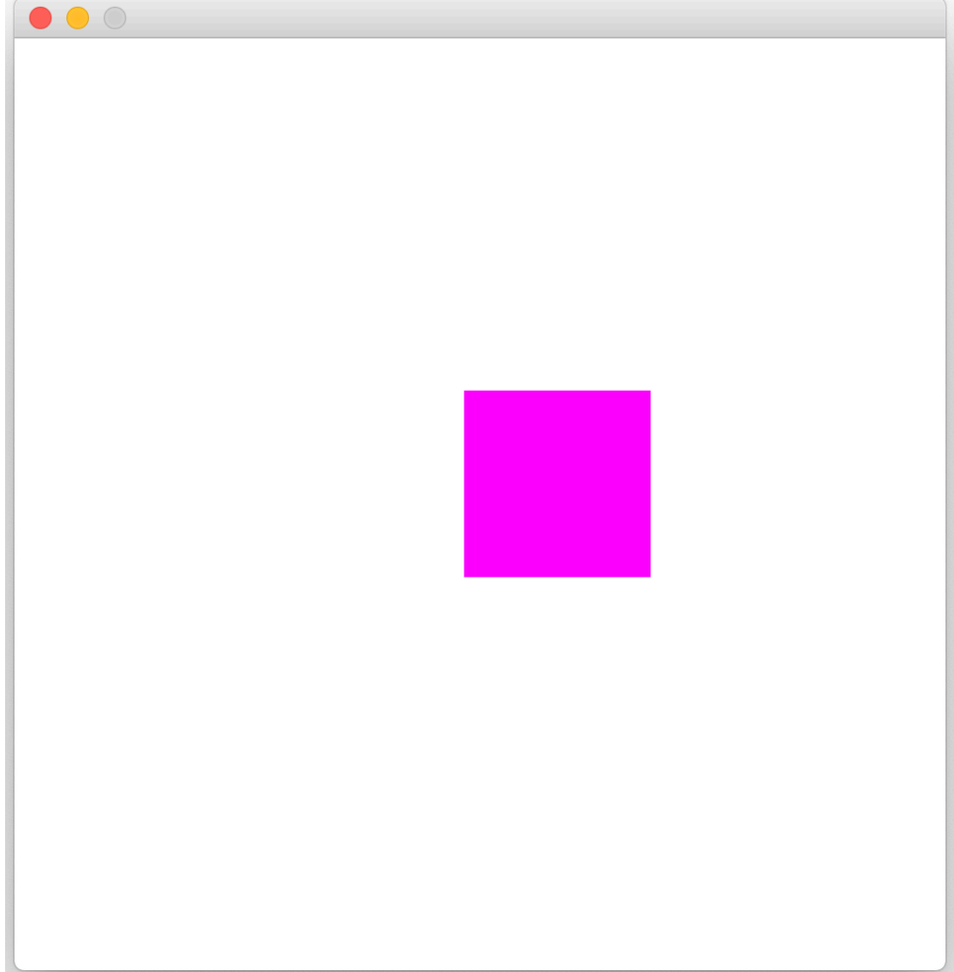

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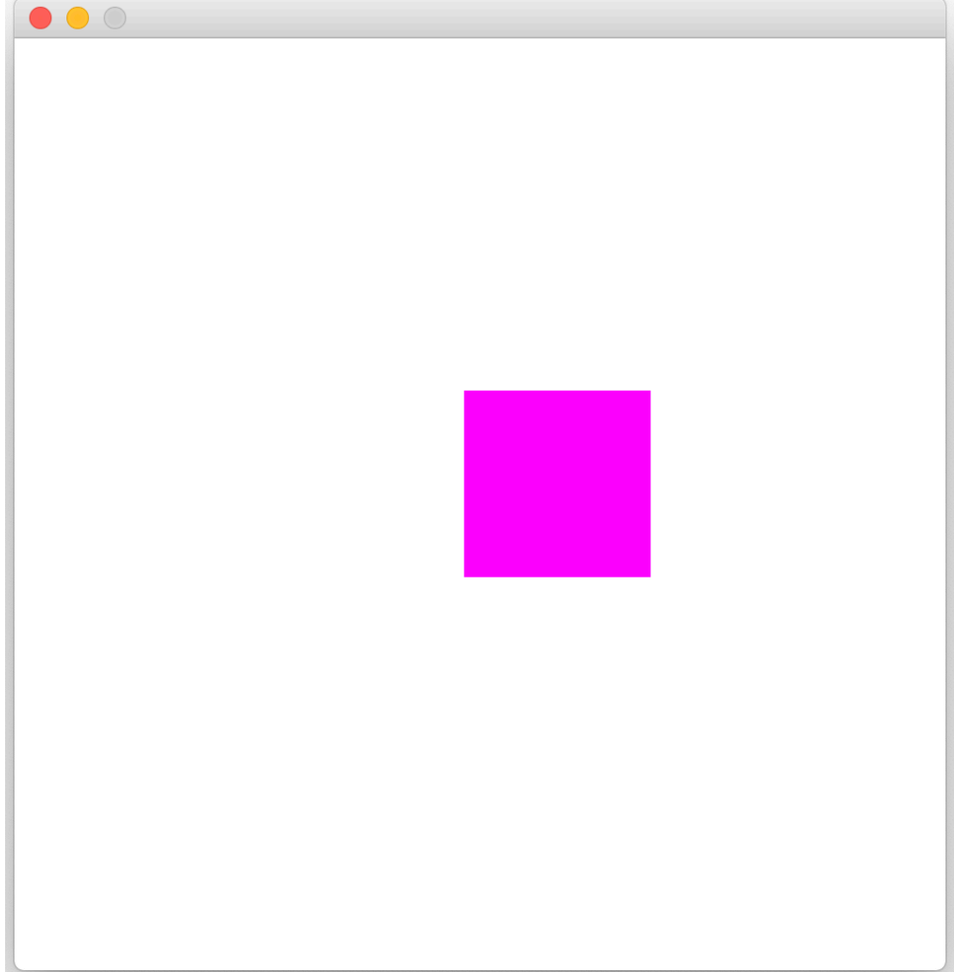

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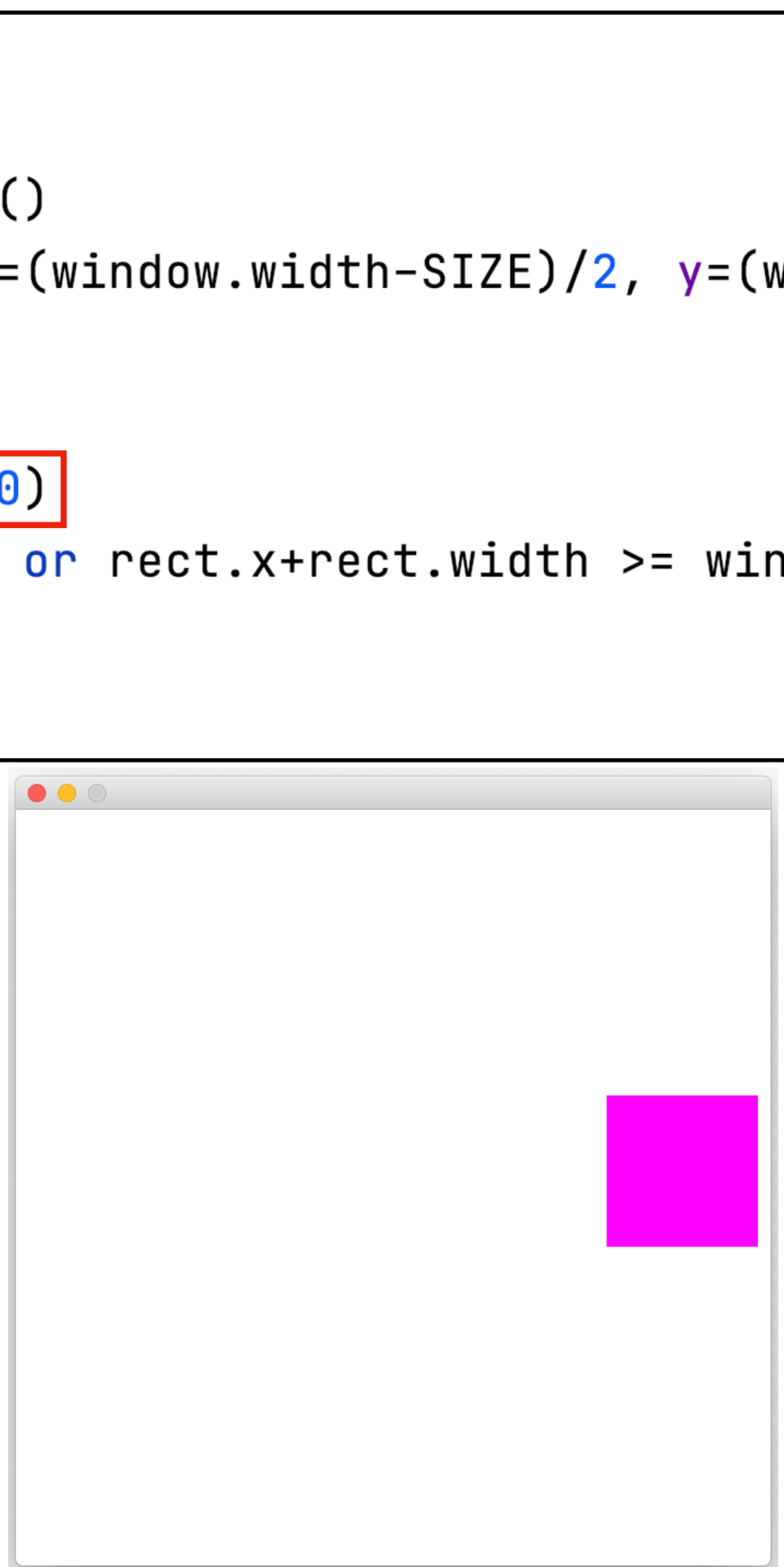

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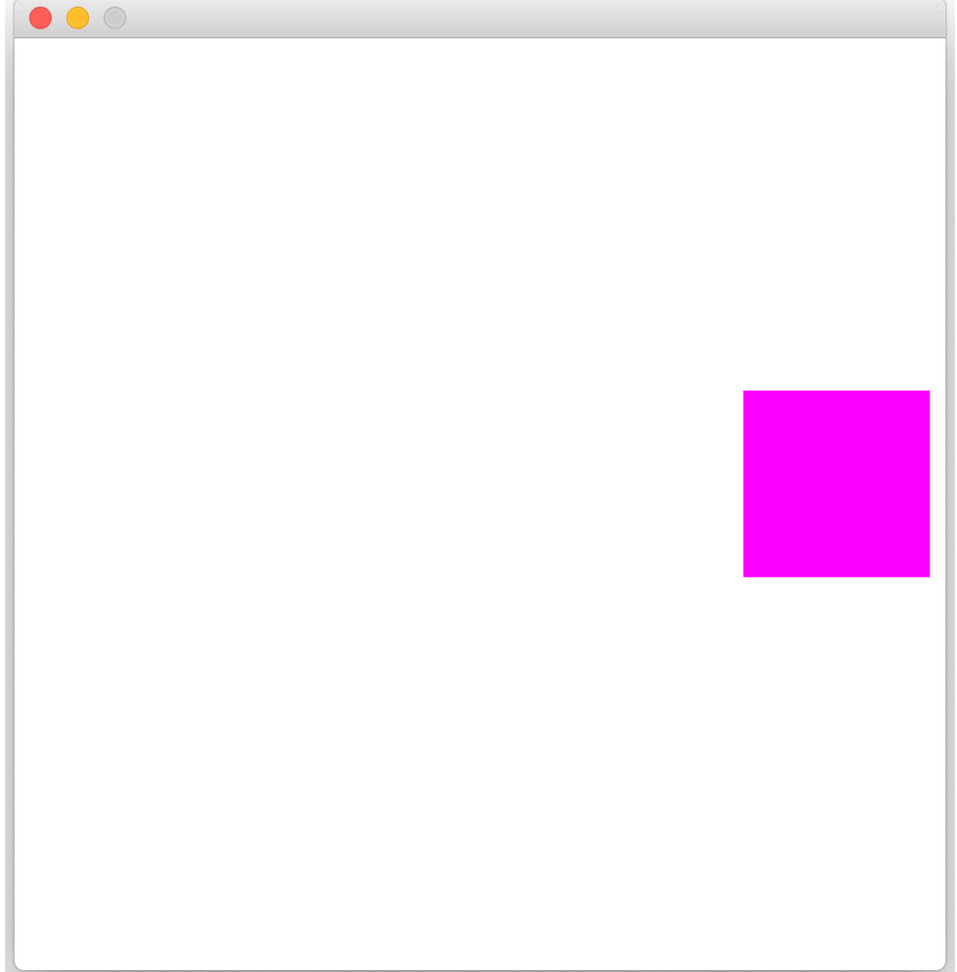

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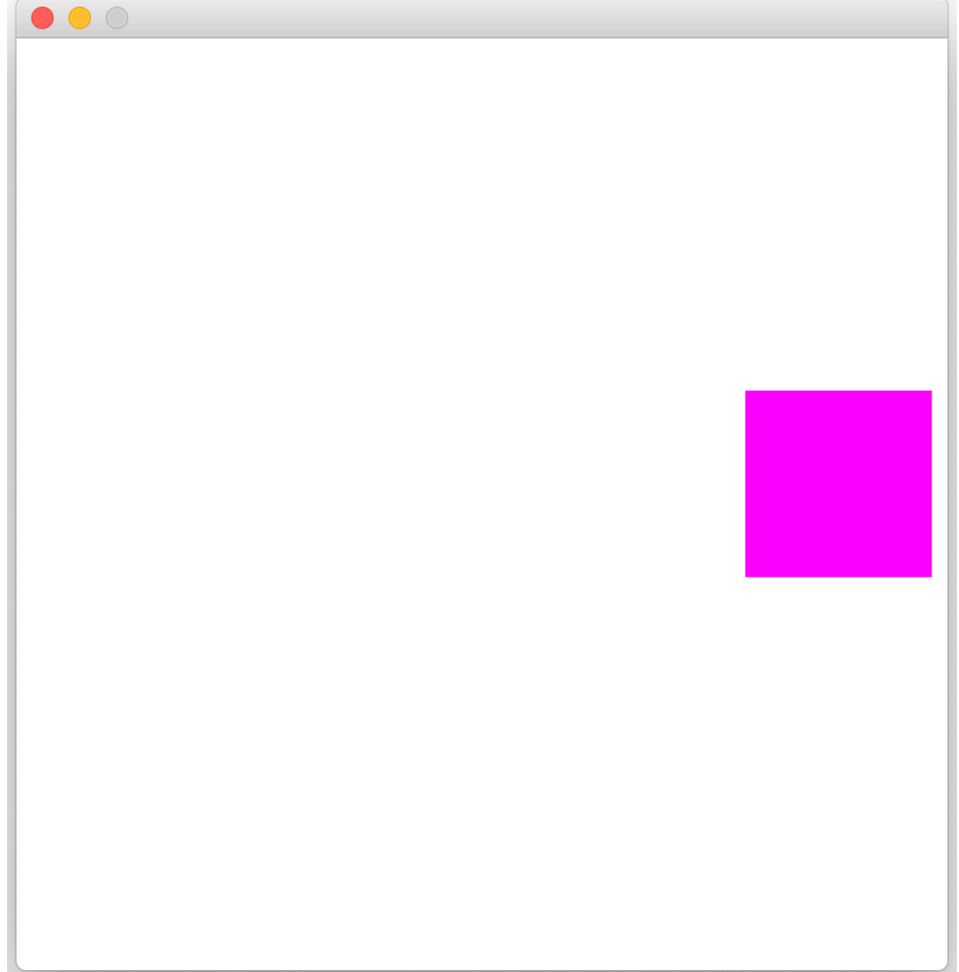

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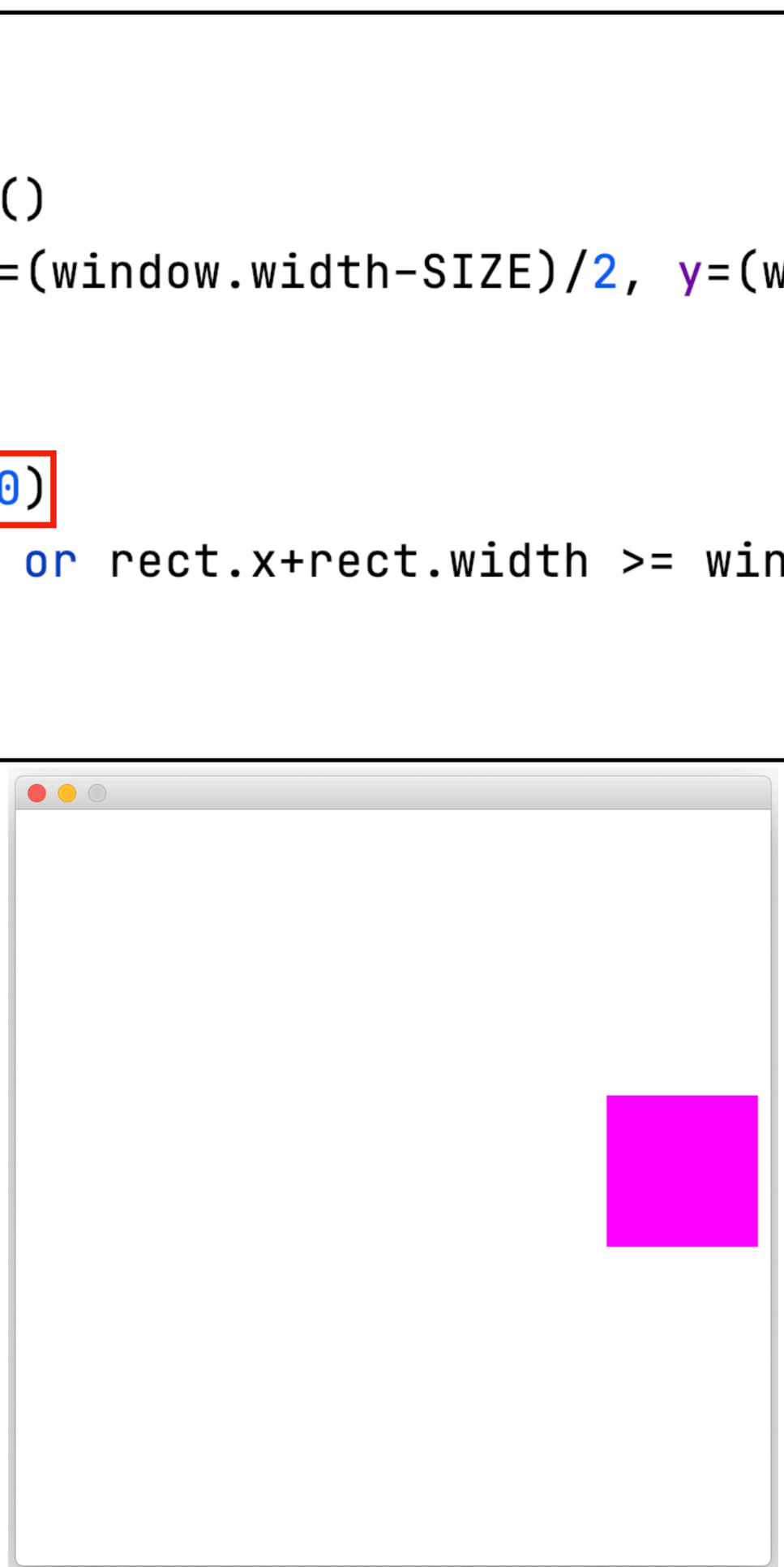

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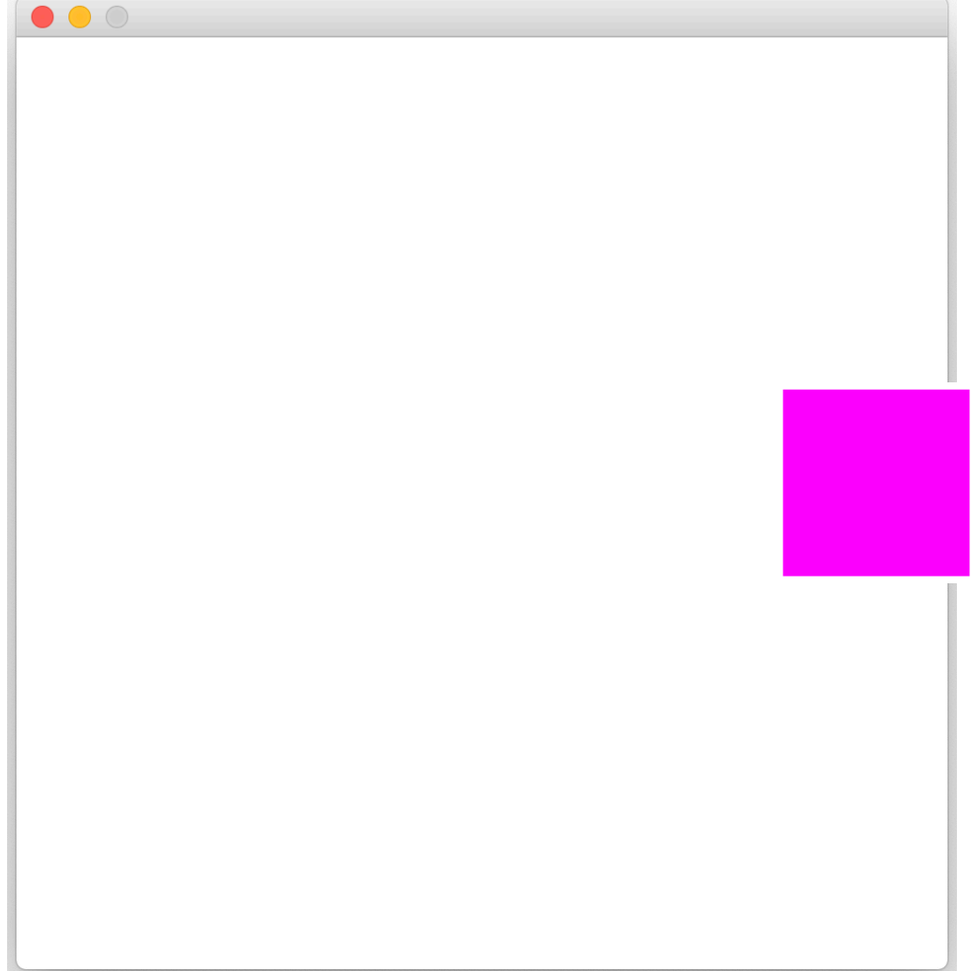

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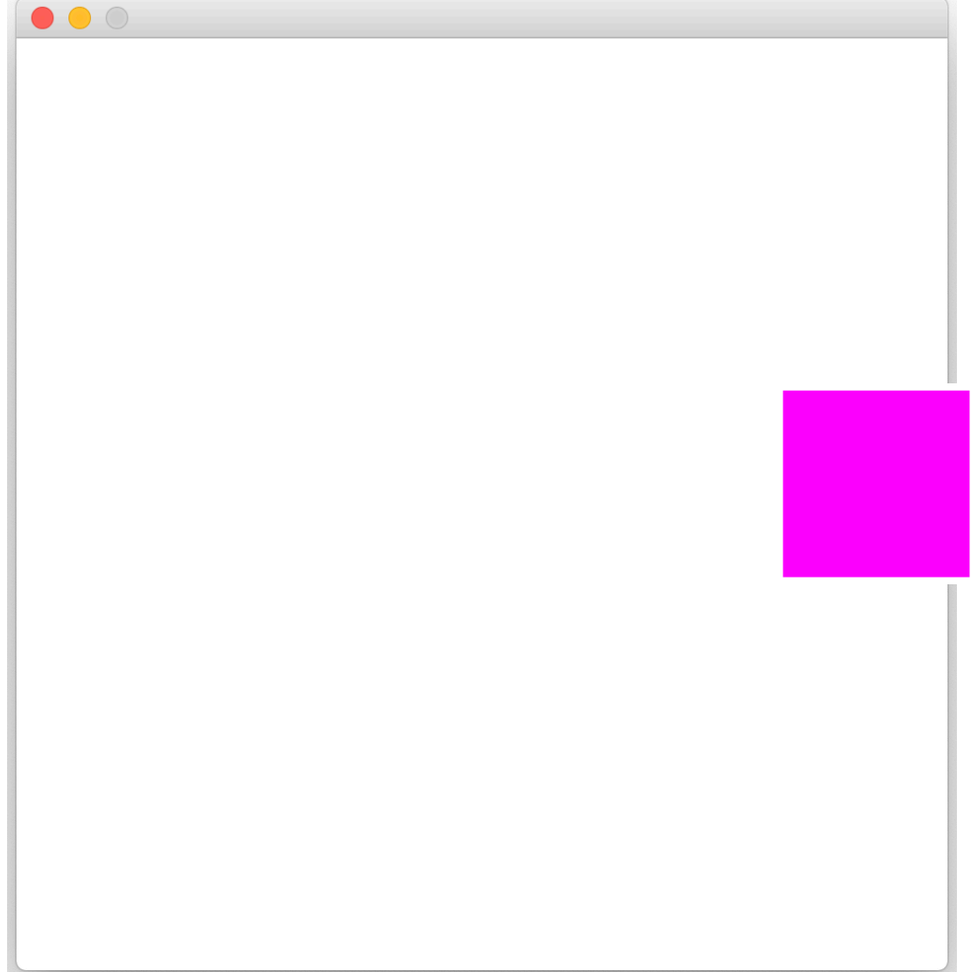

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```
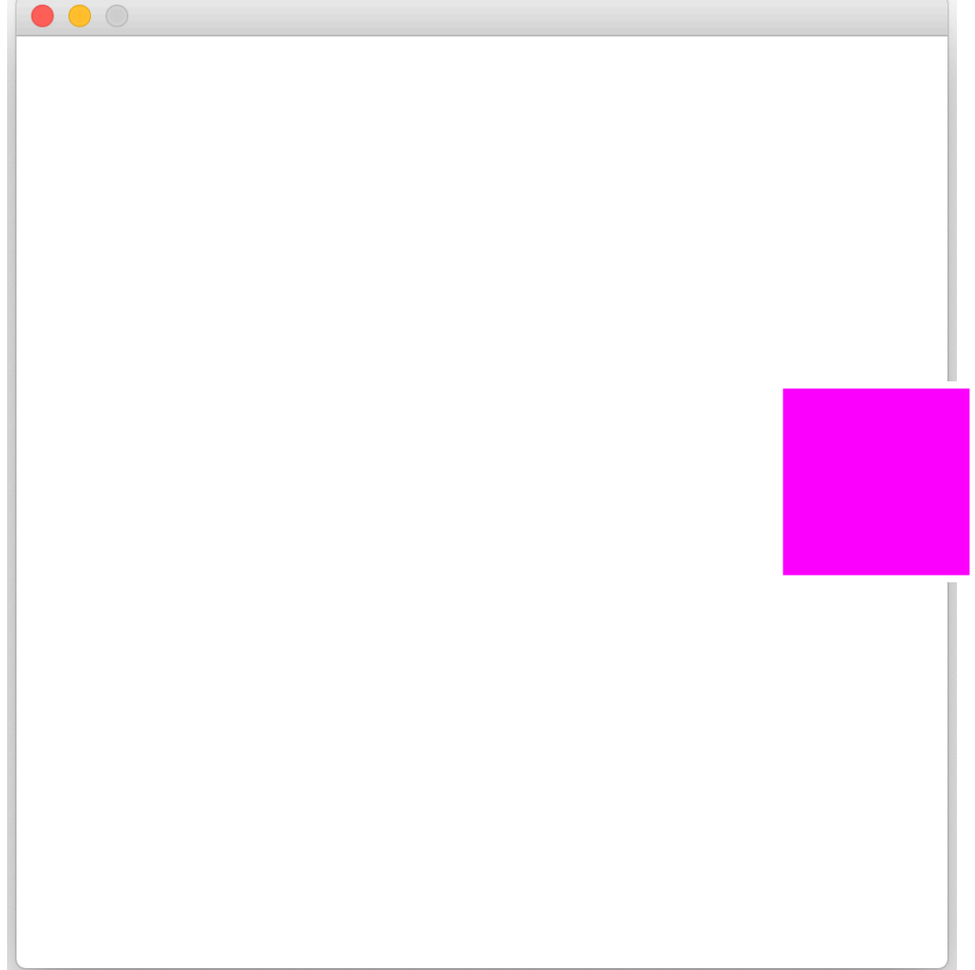

False



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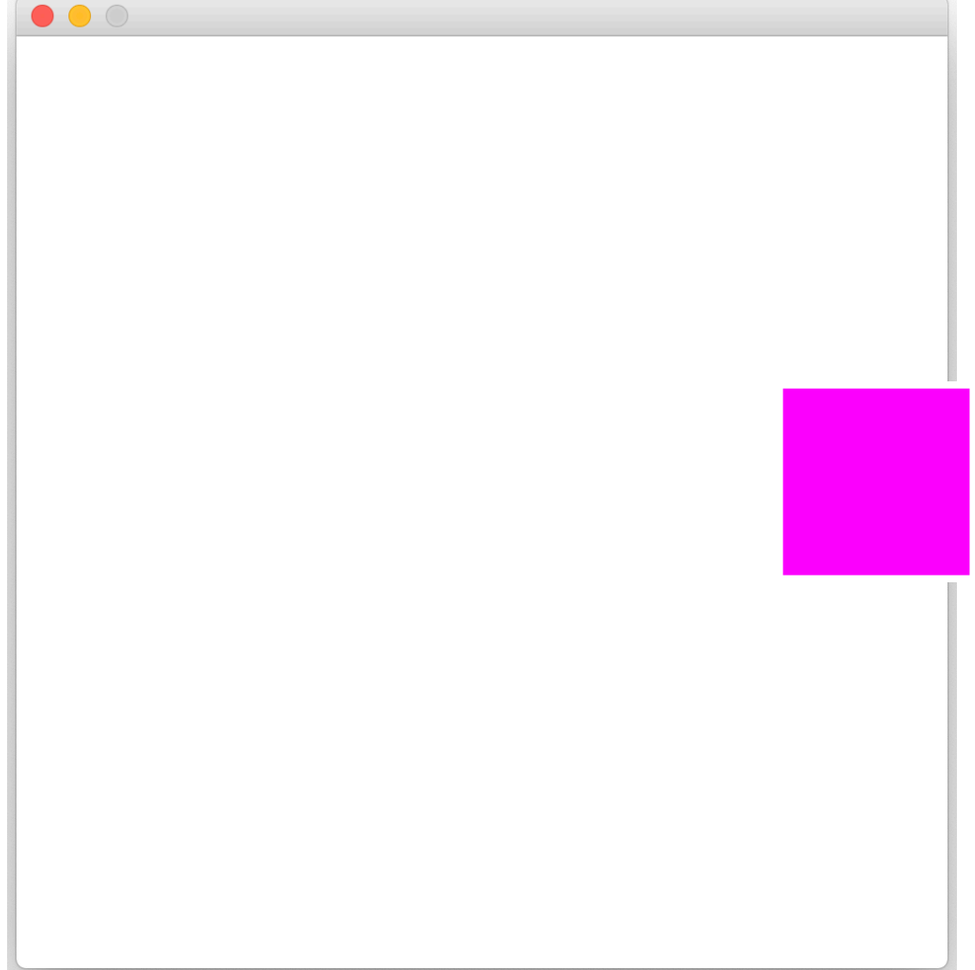
False



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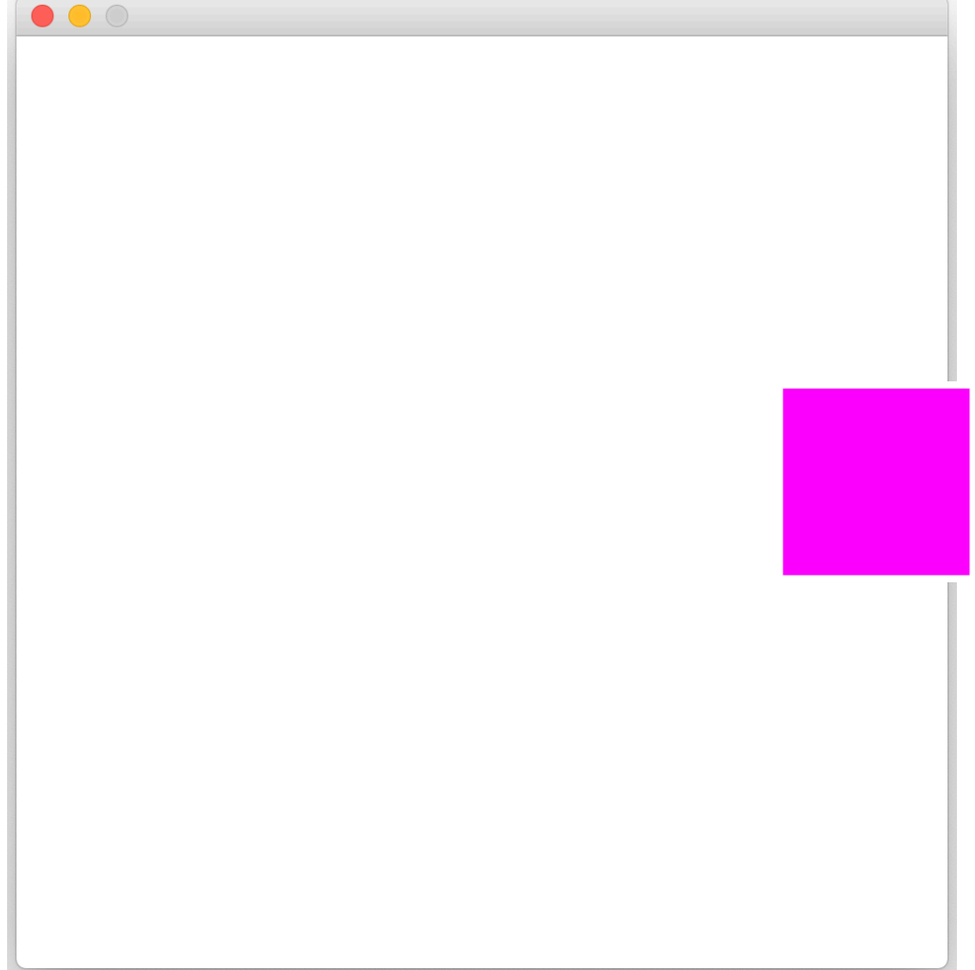
False

True



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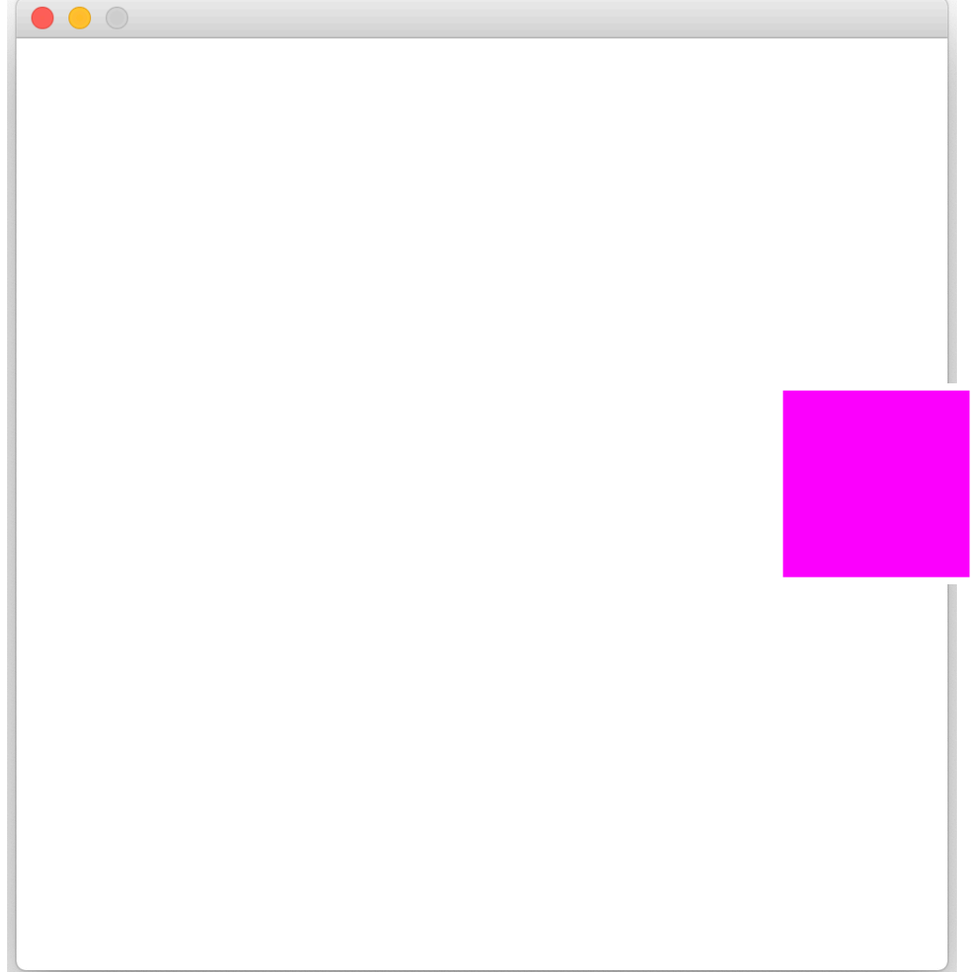

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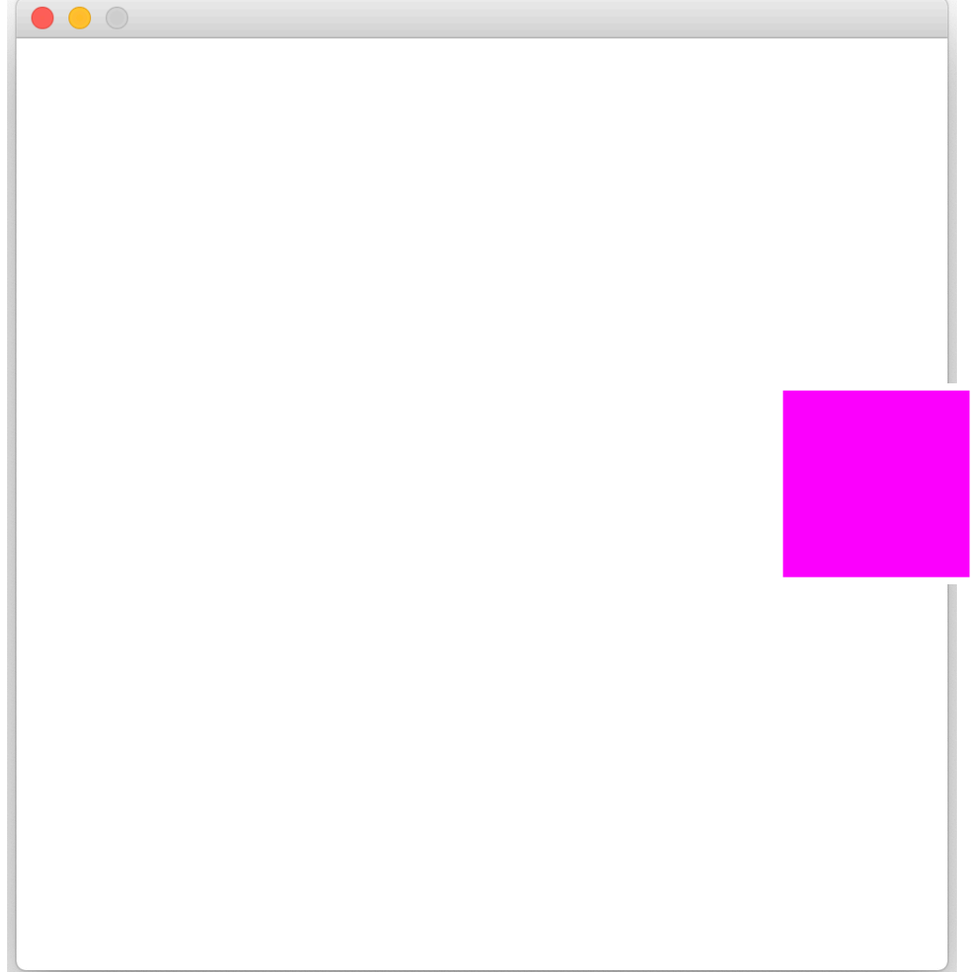

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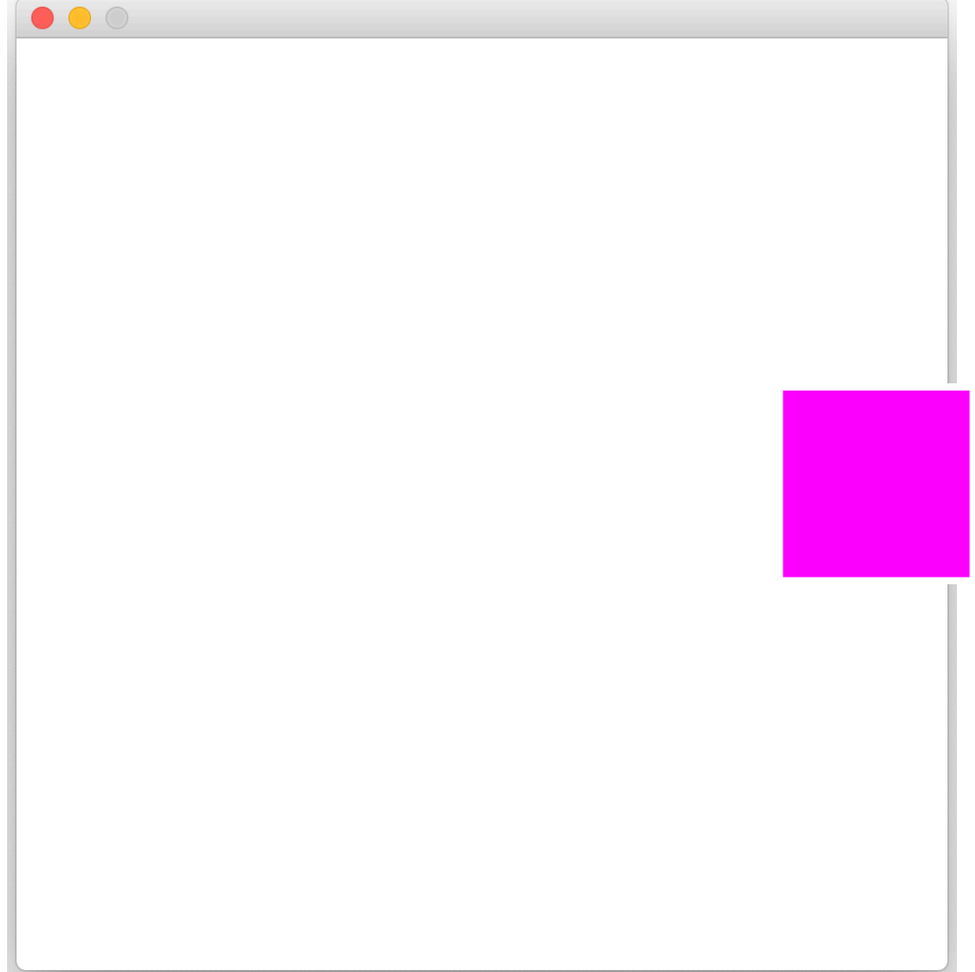

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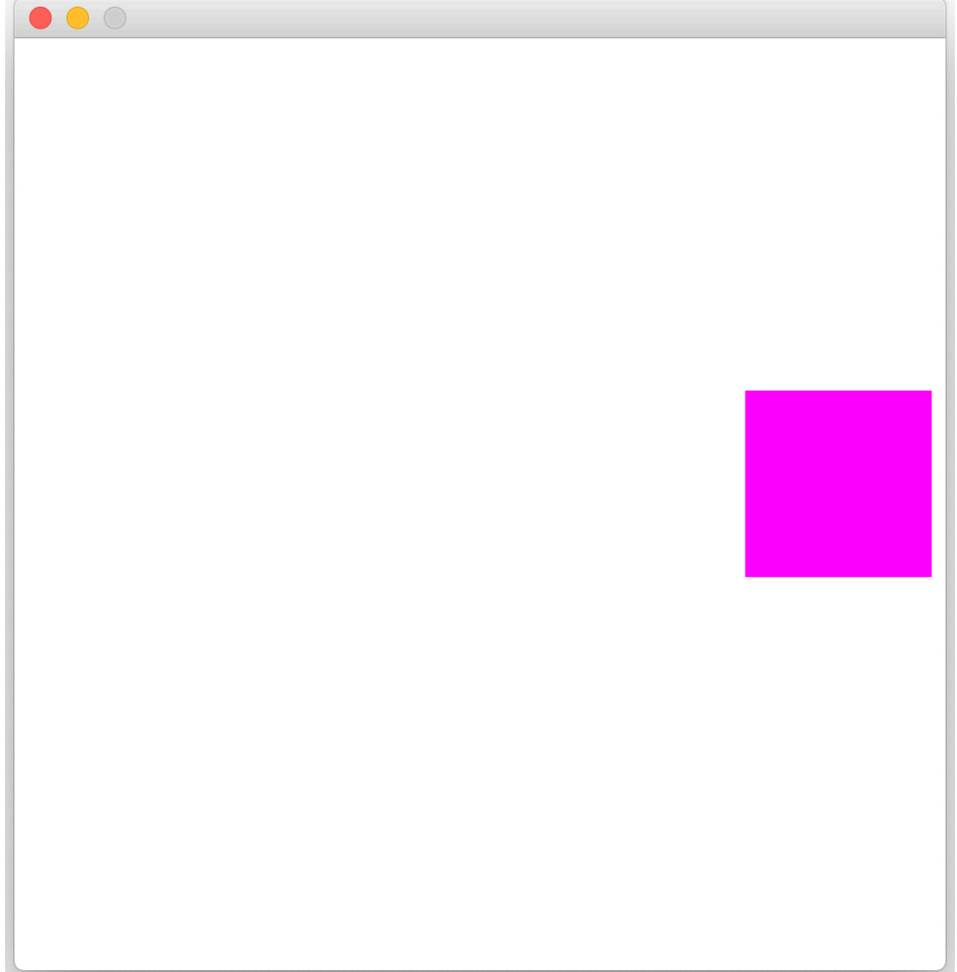

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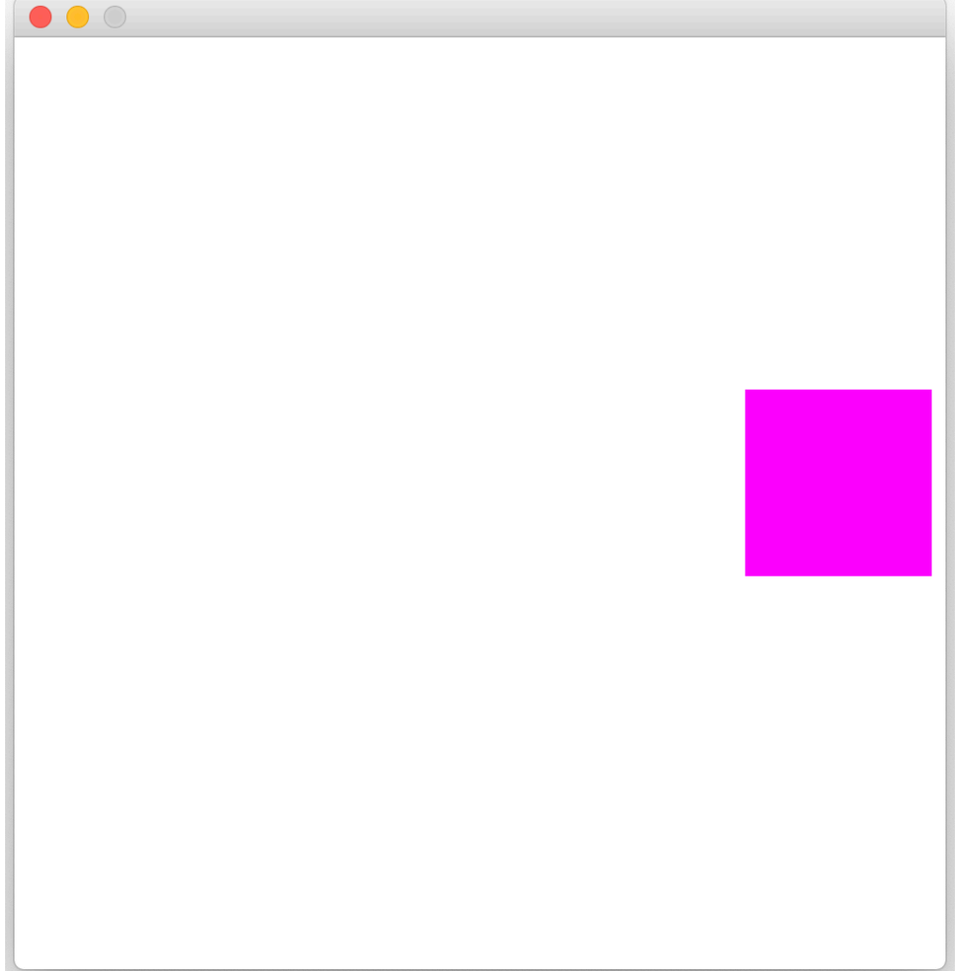

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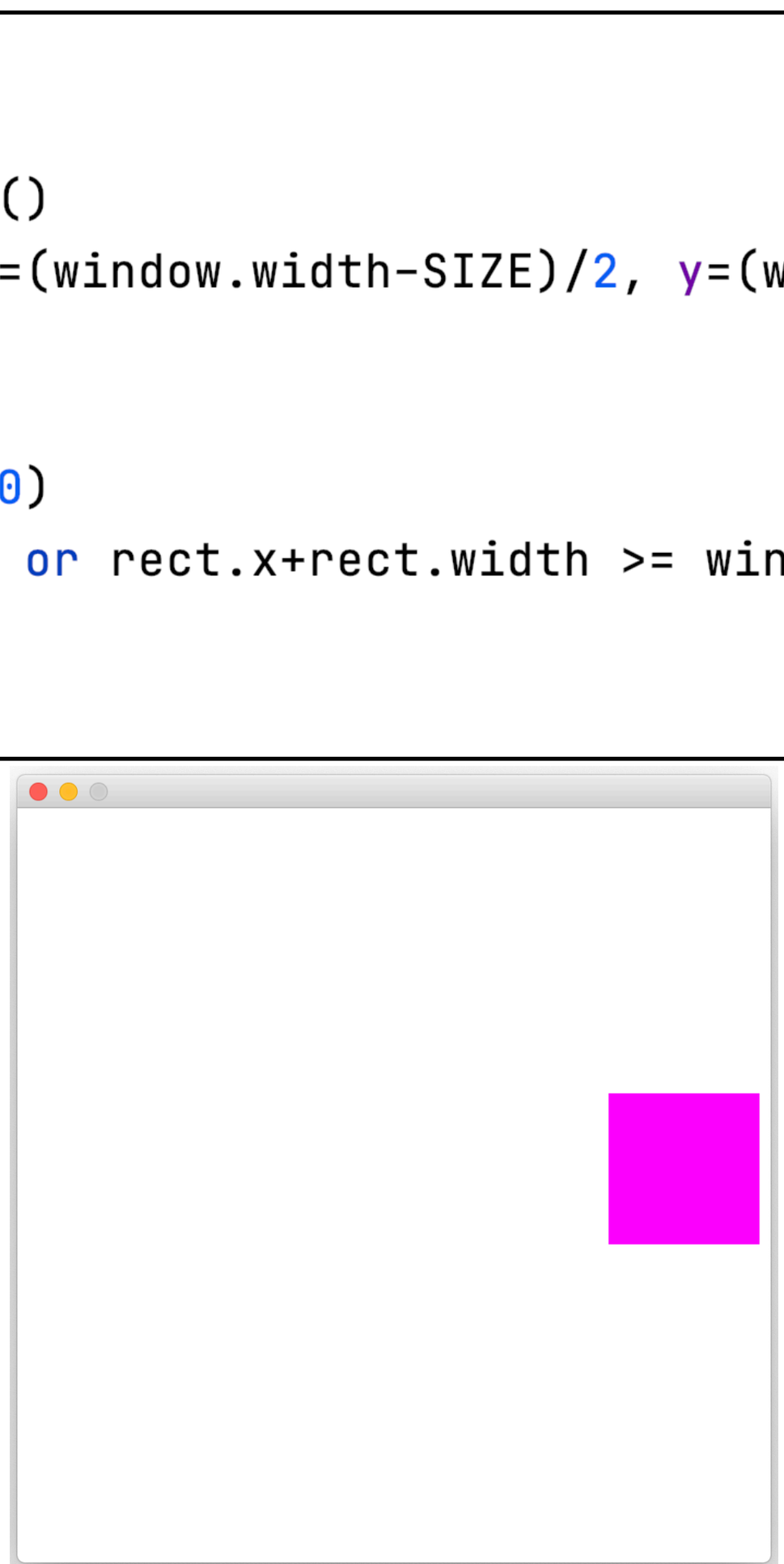

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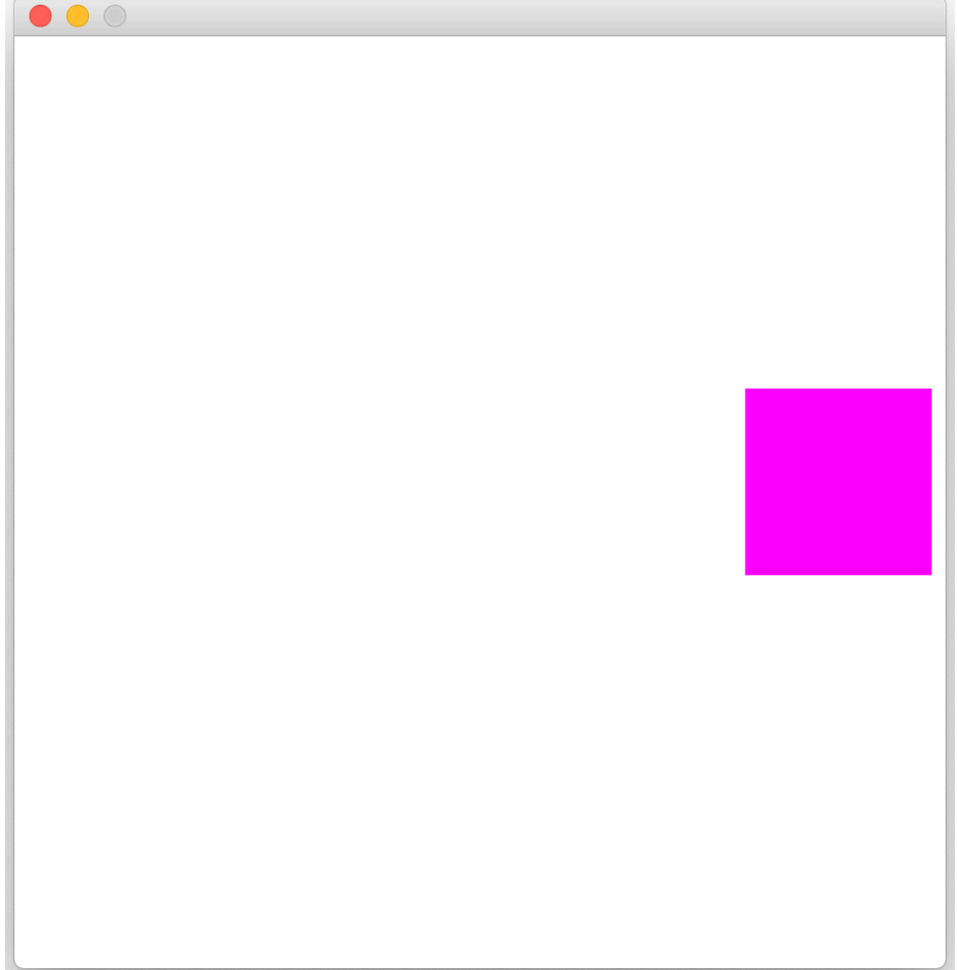

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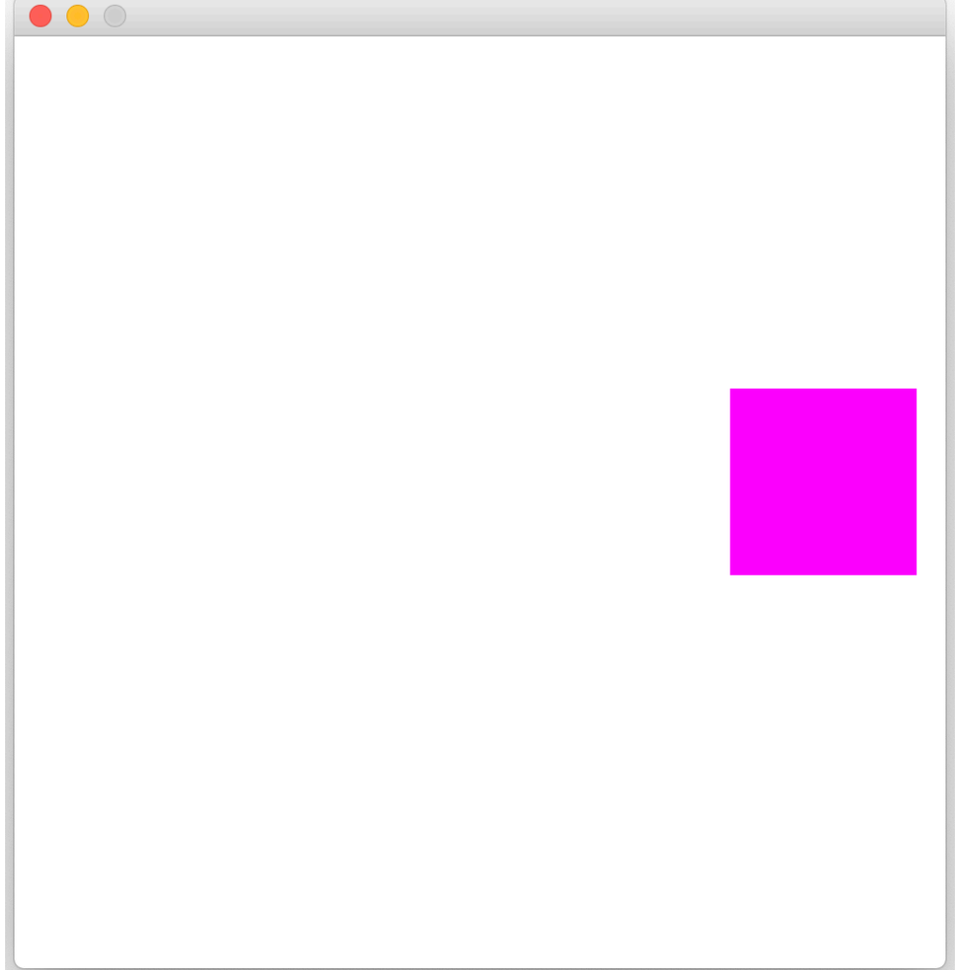

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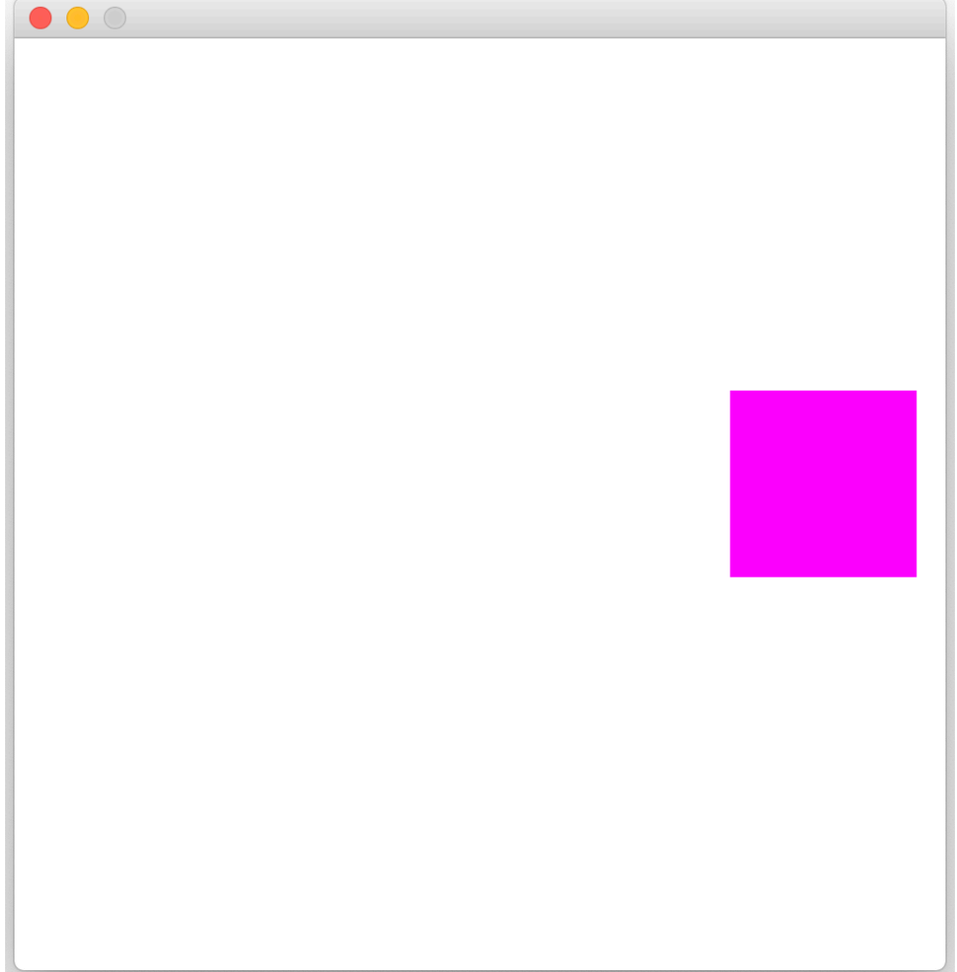

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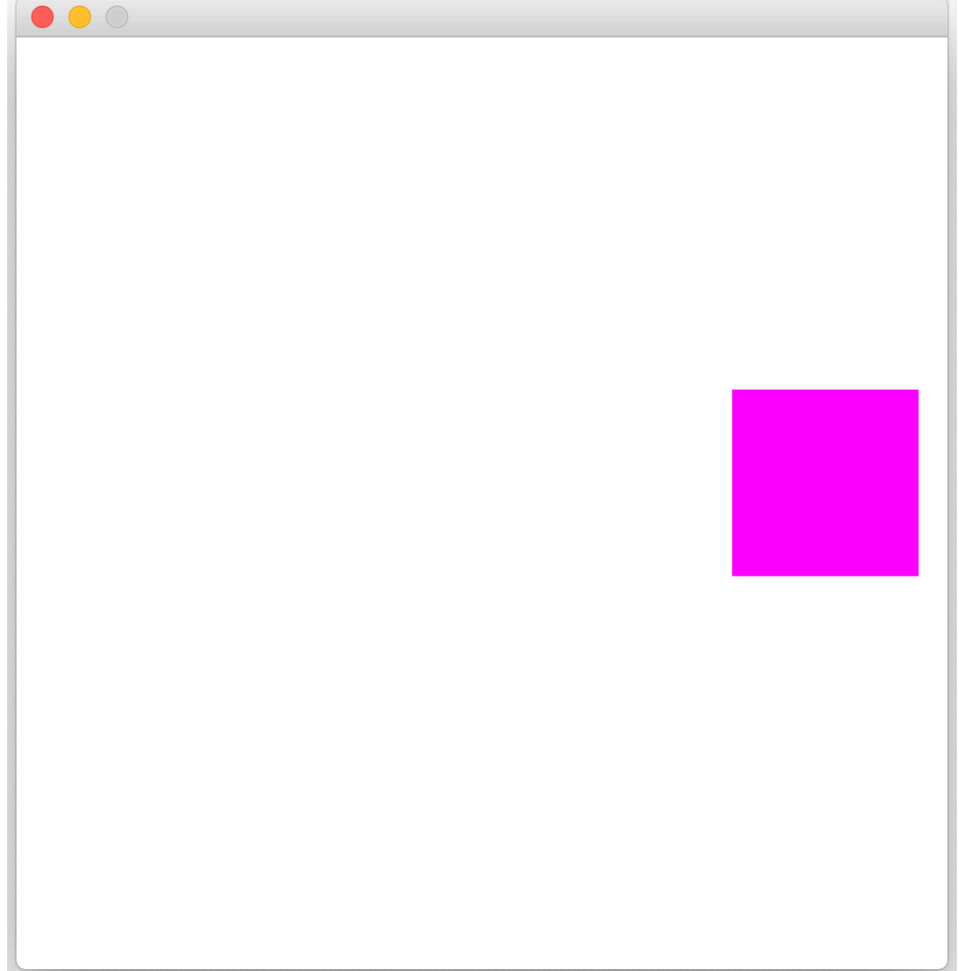

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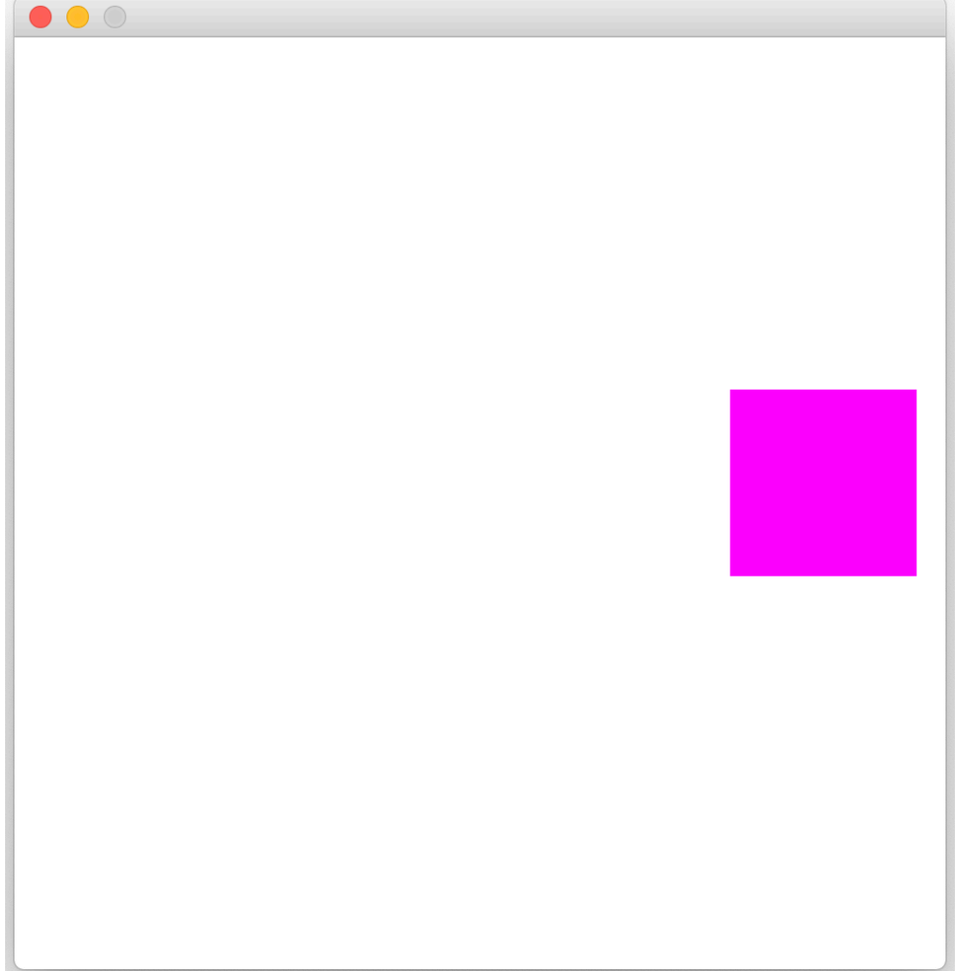

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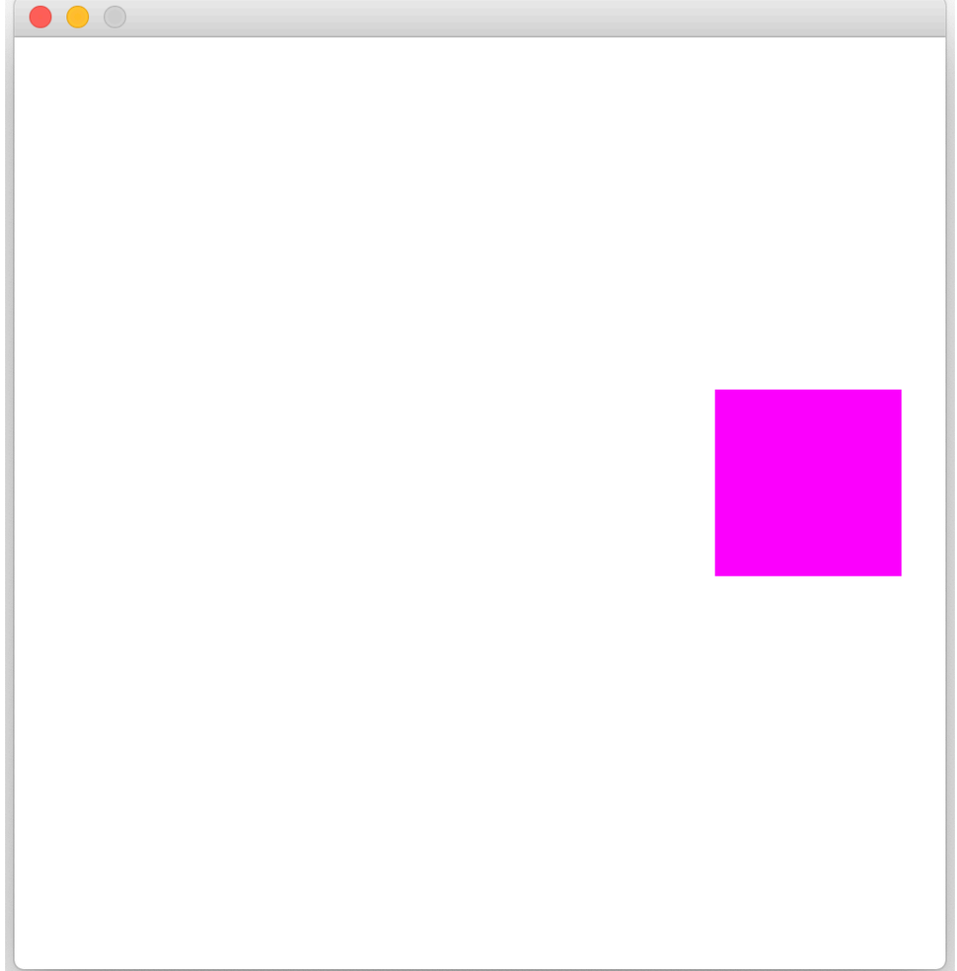

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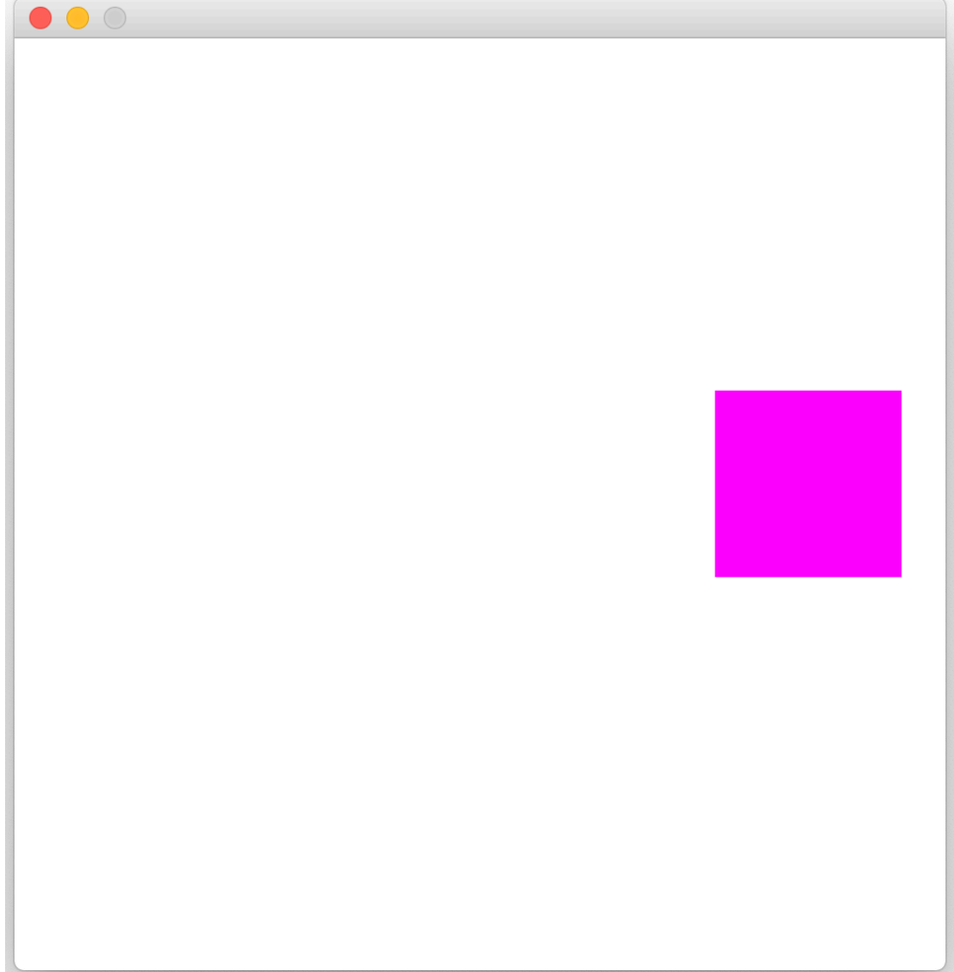

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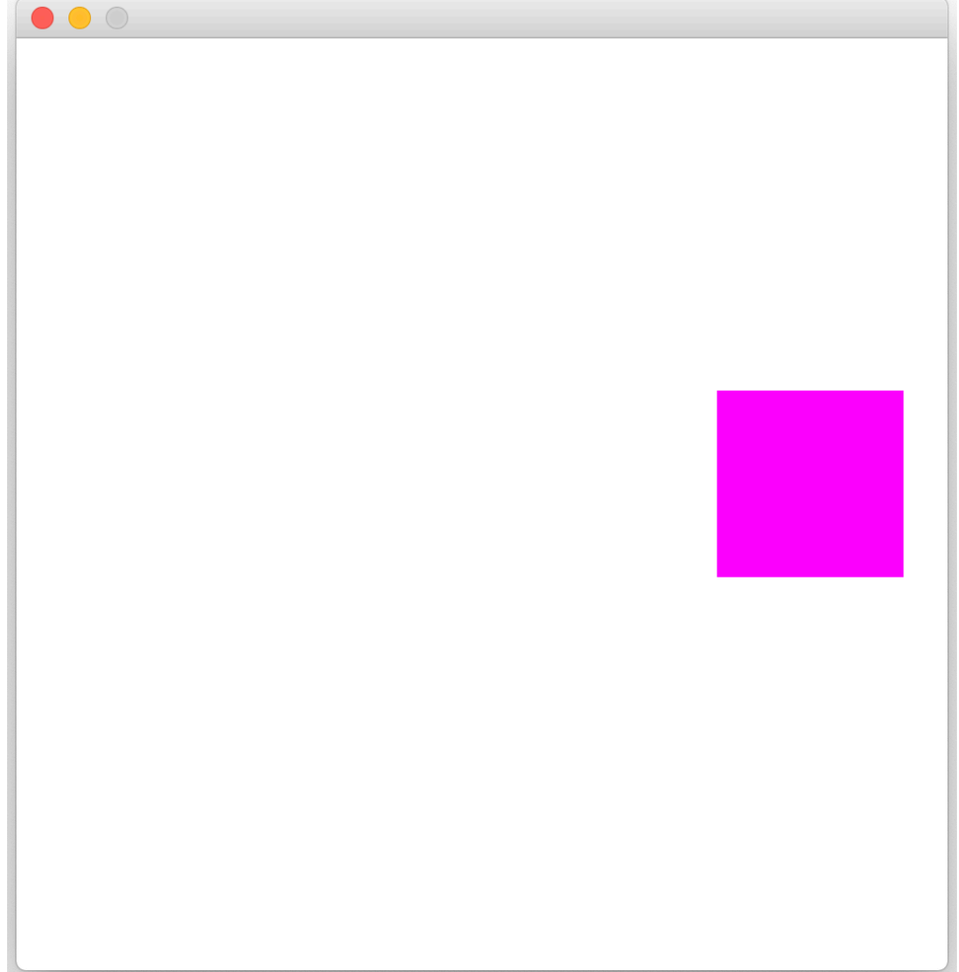

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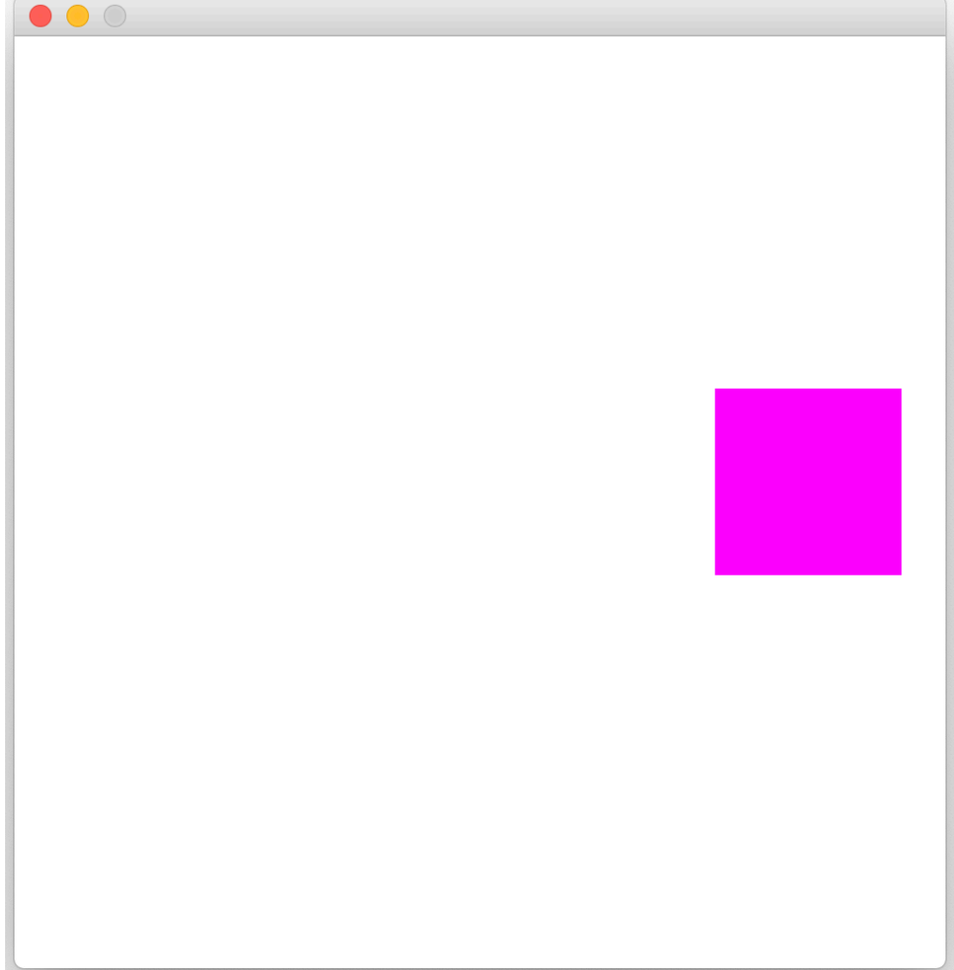

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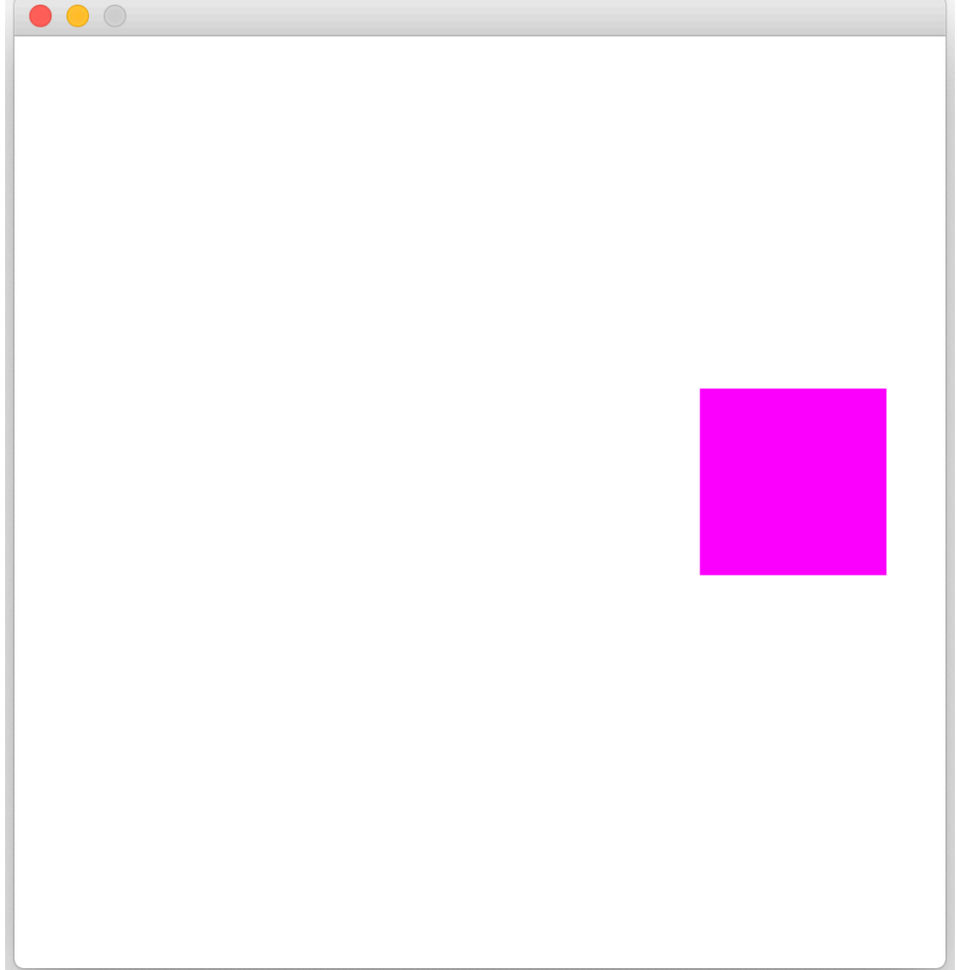

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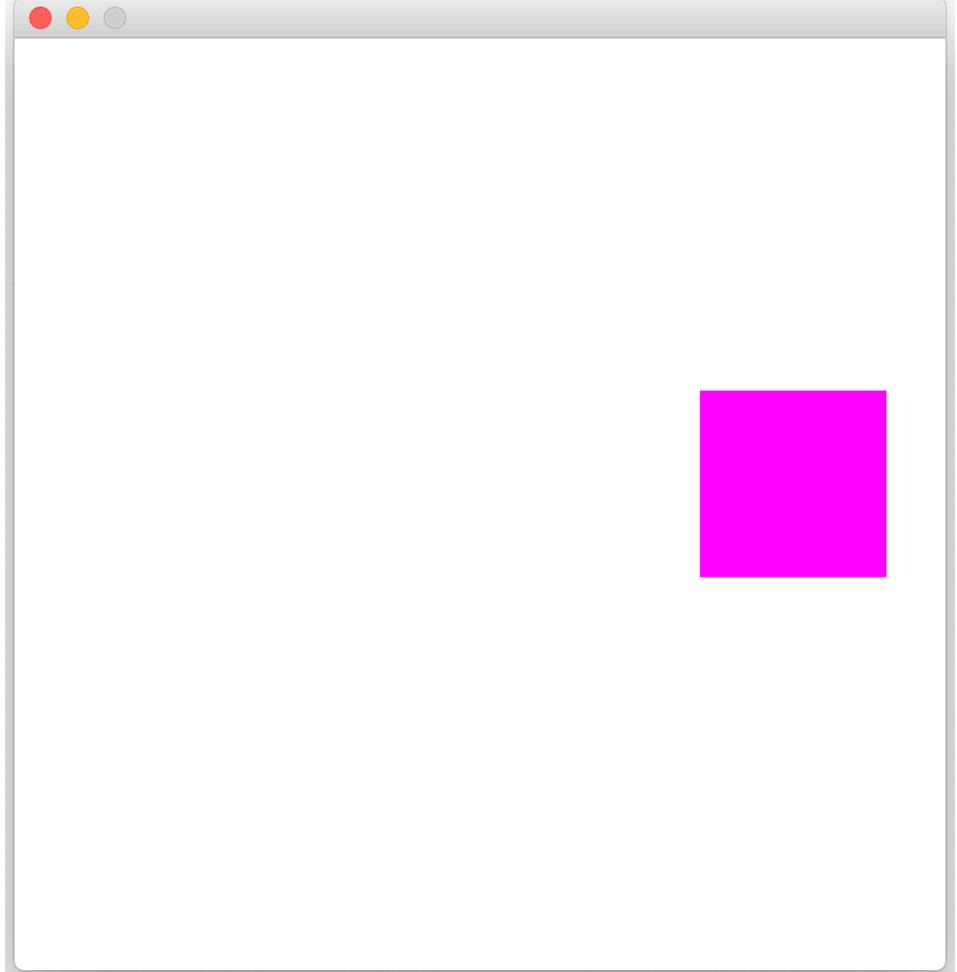

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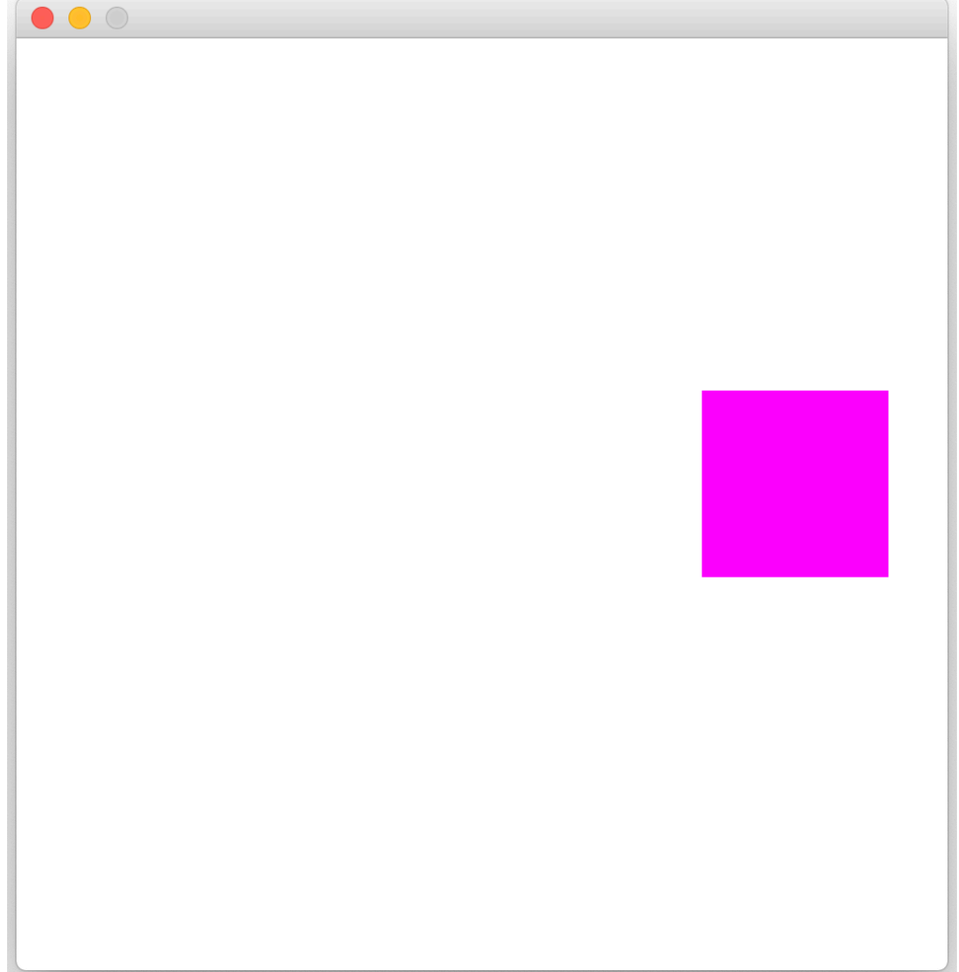

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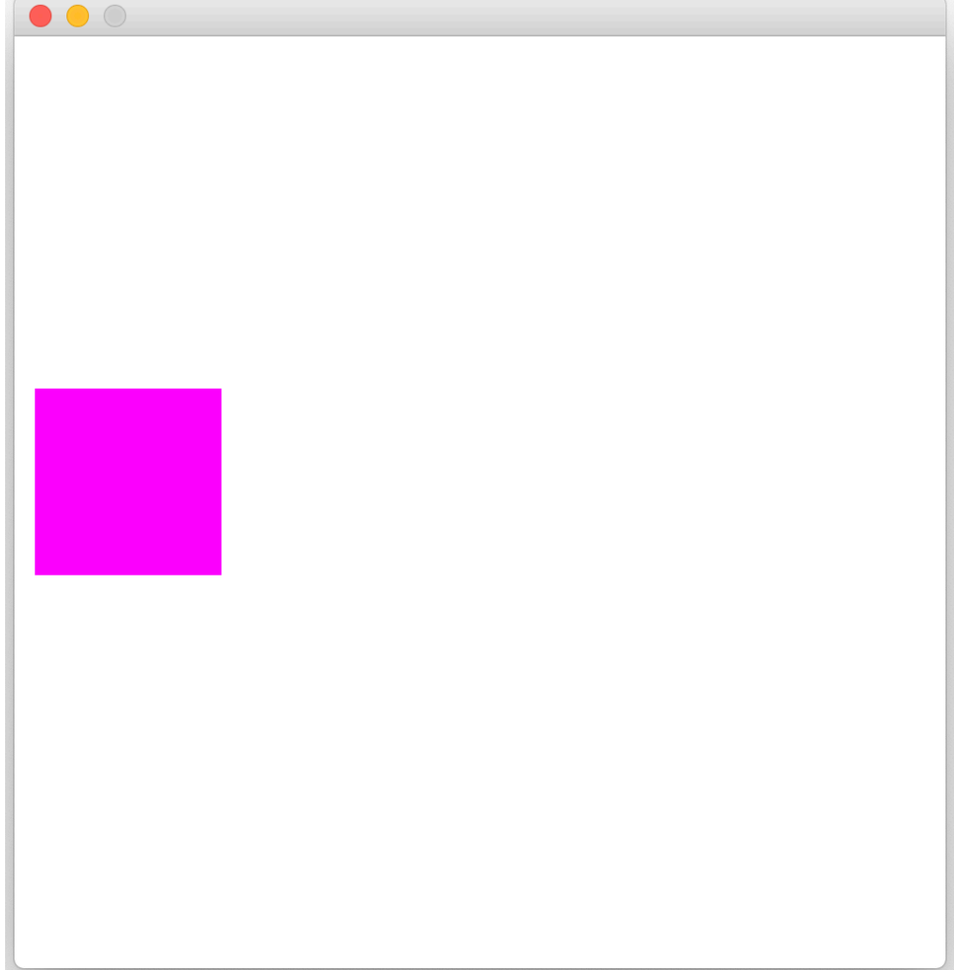

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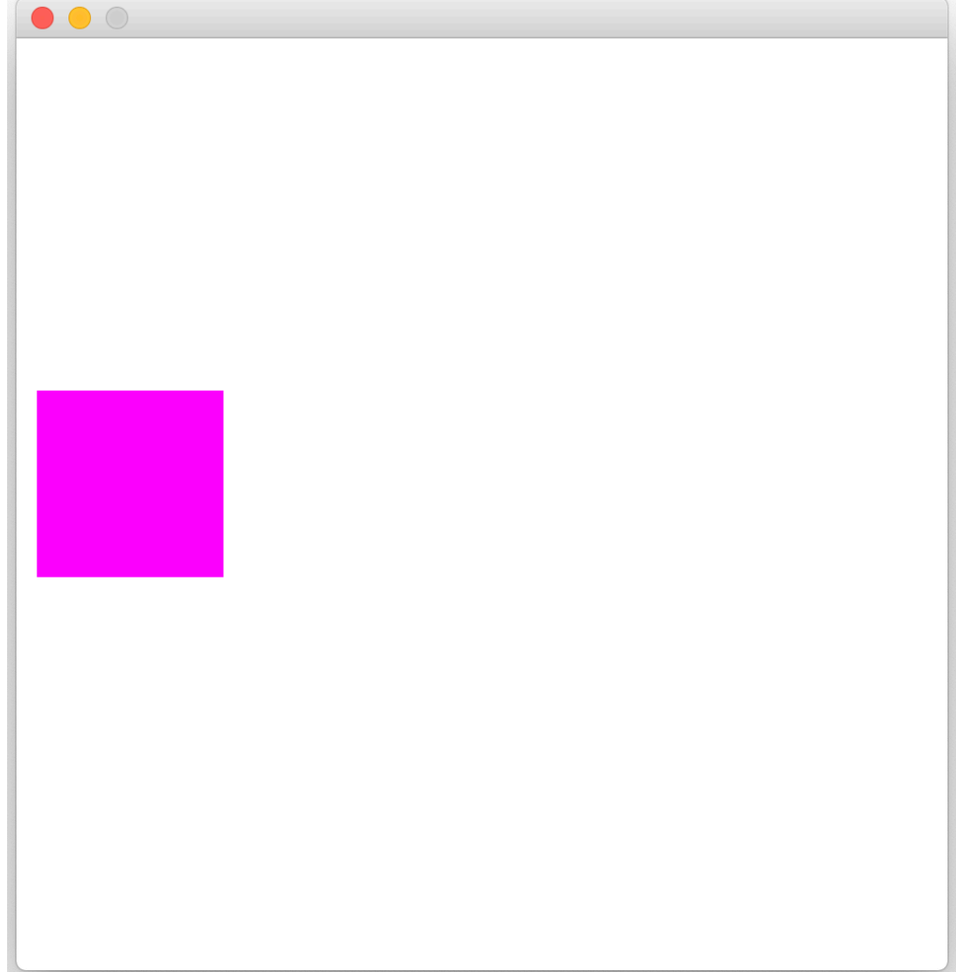

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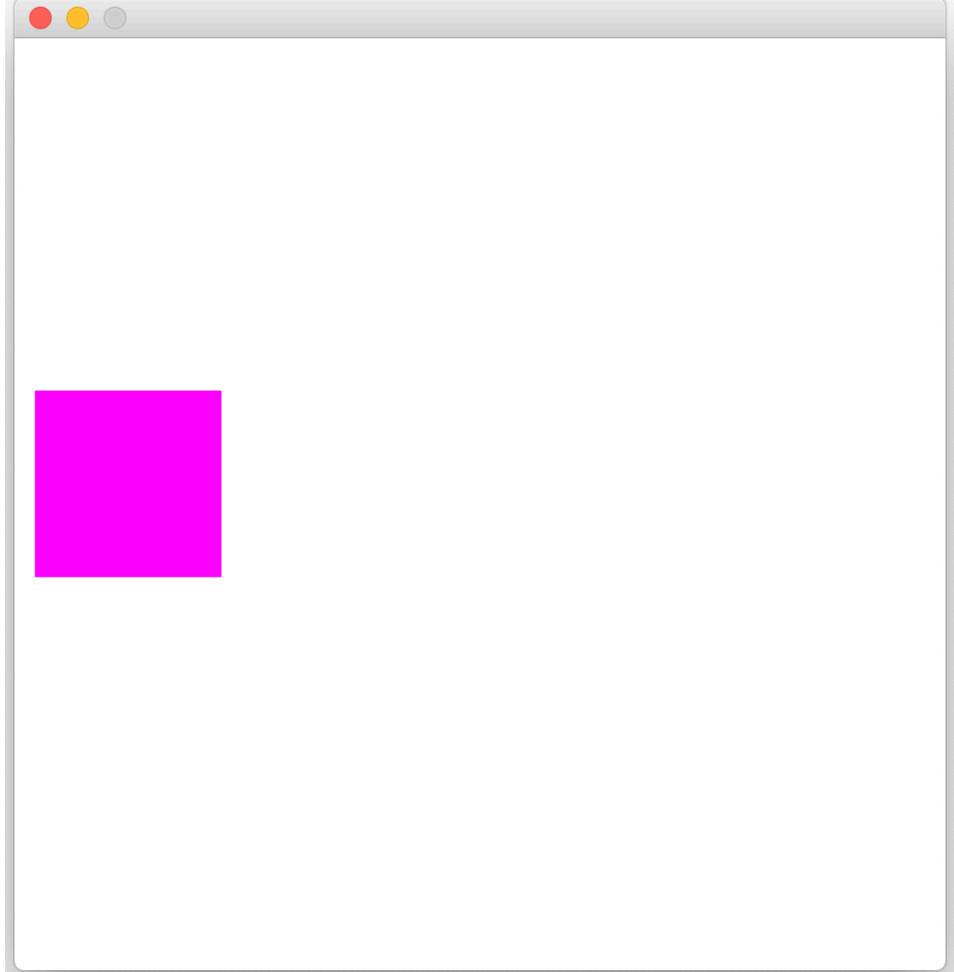

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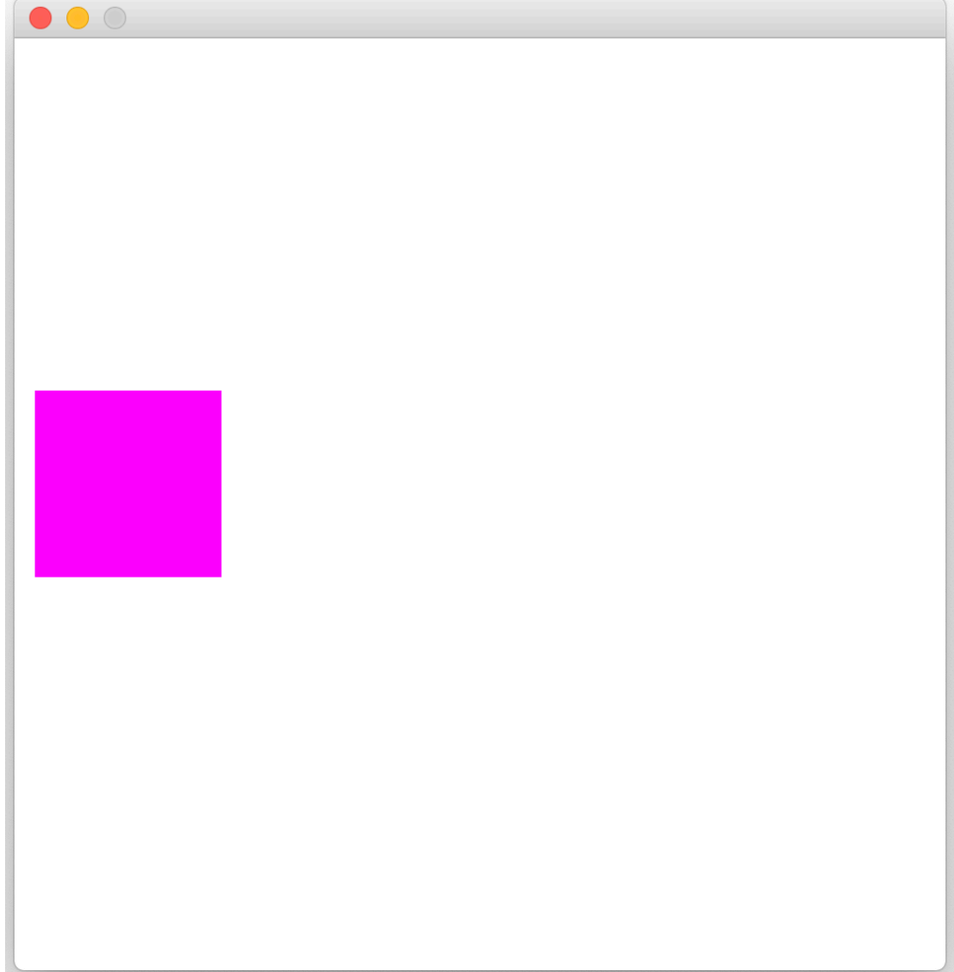

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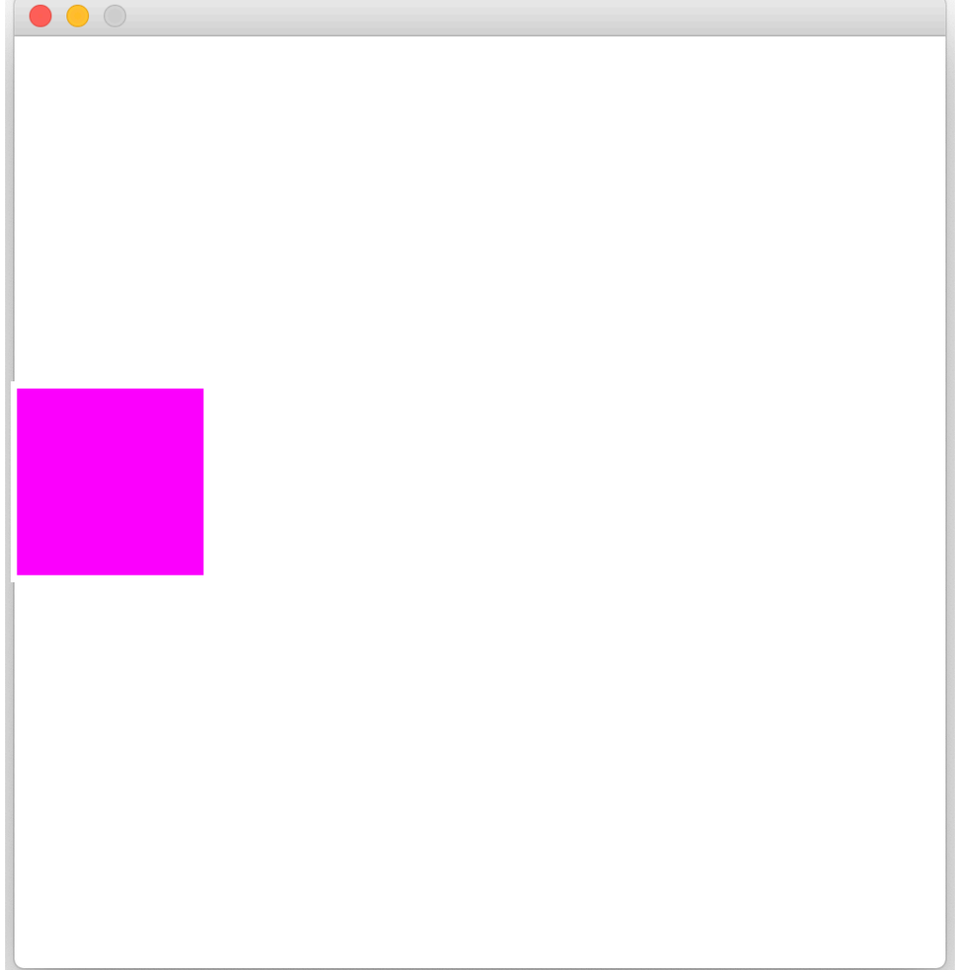

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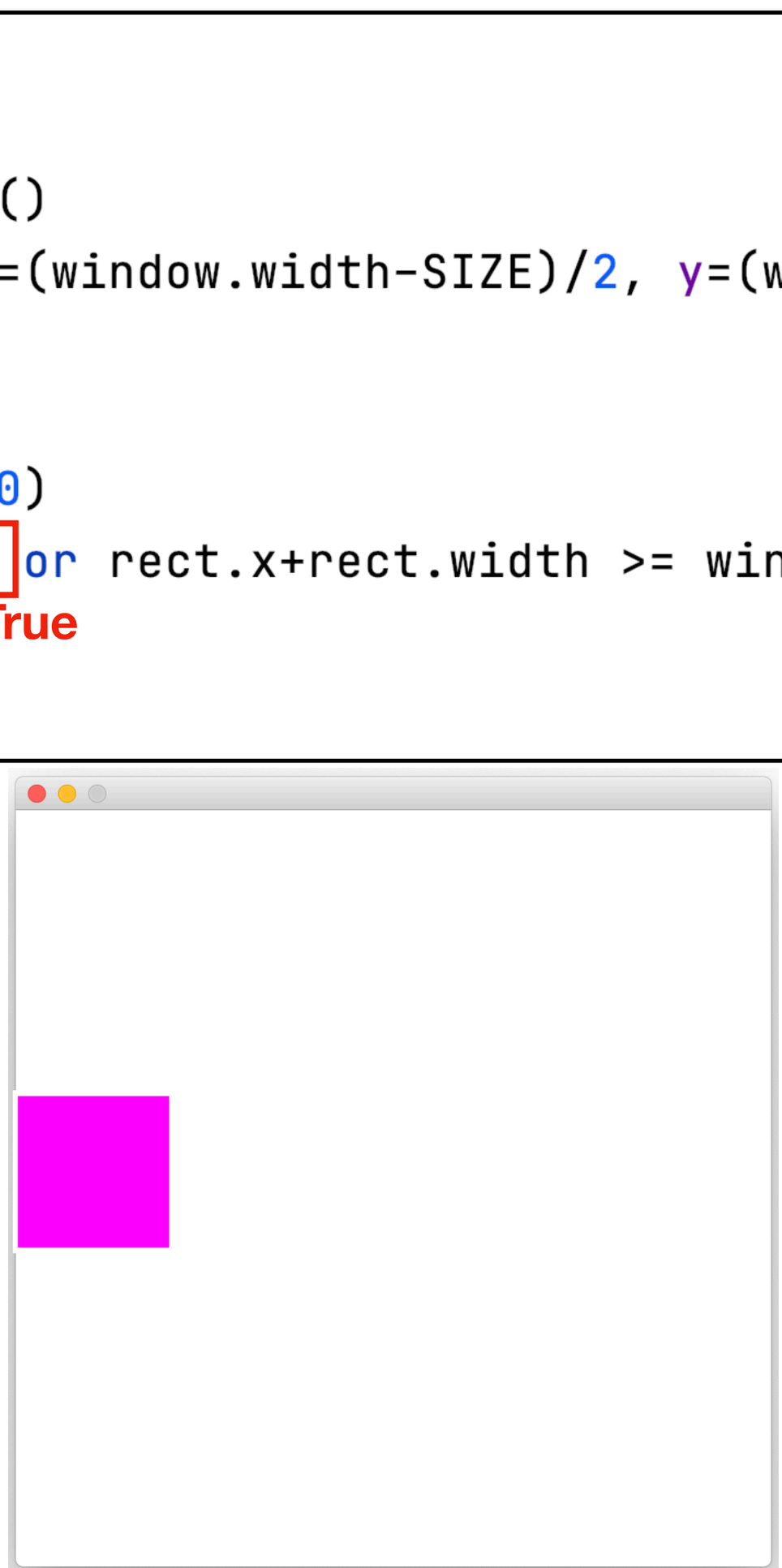
True



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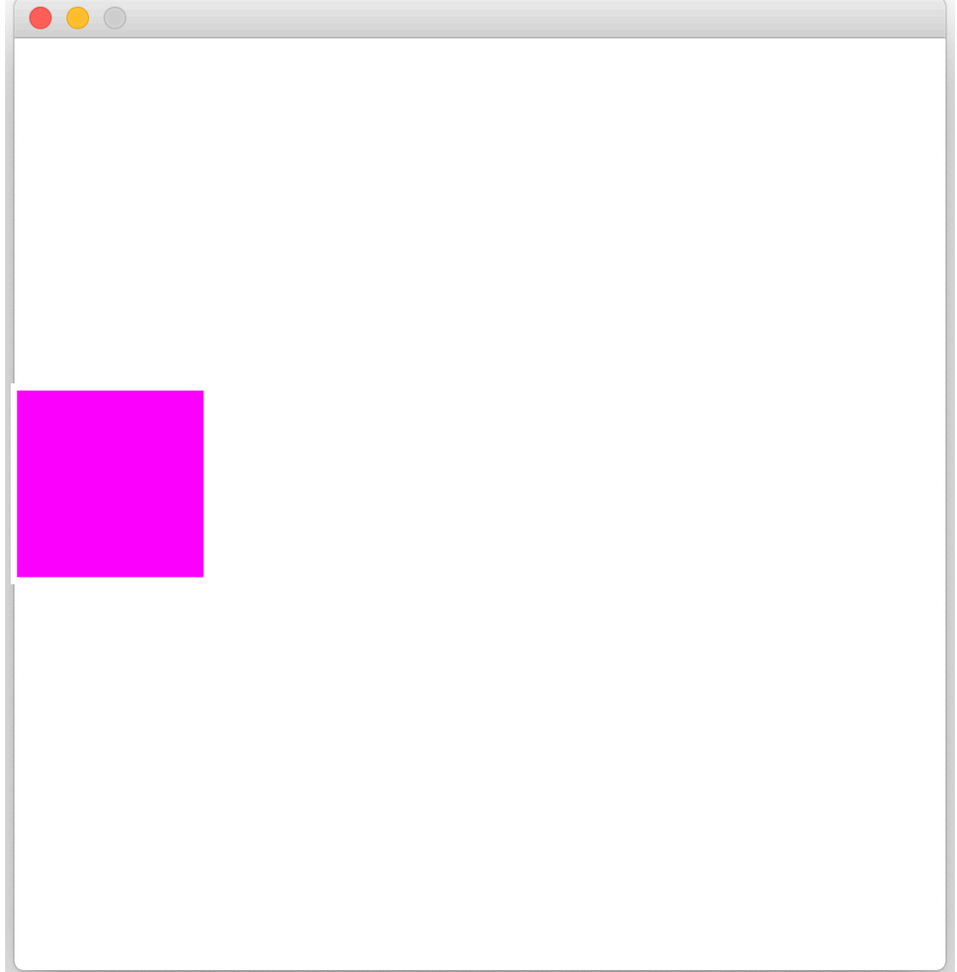

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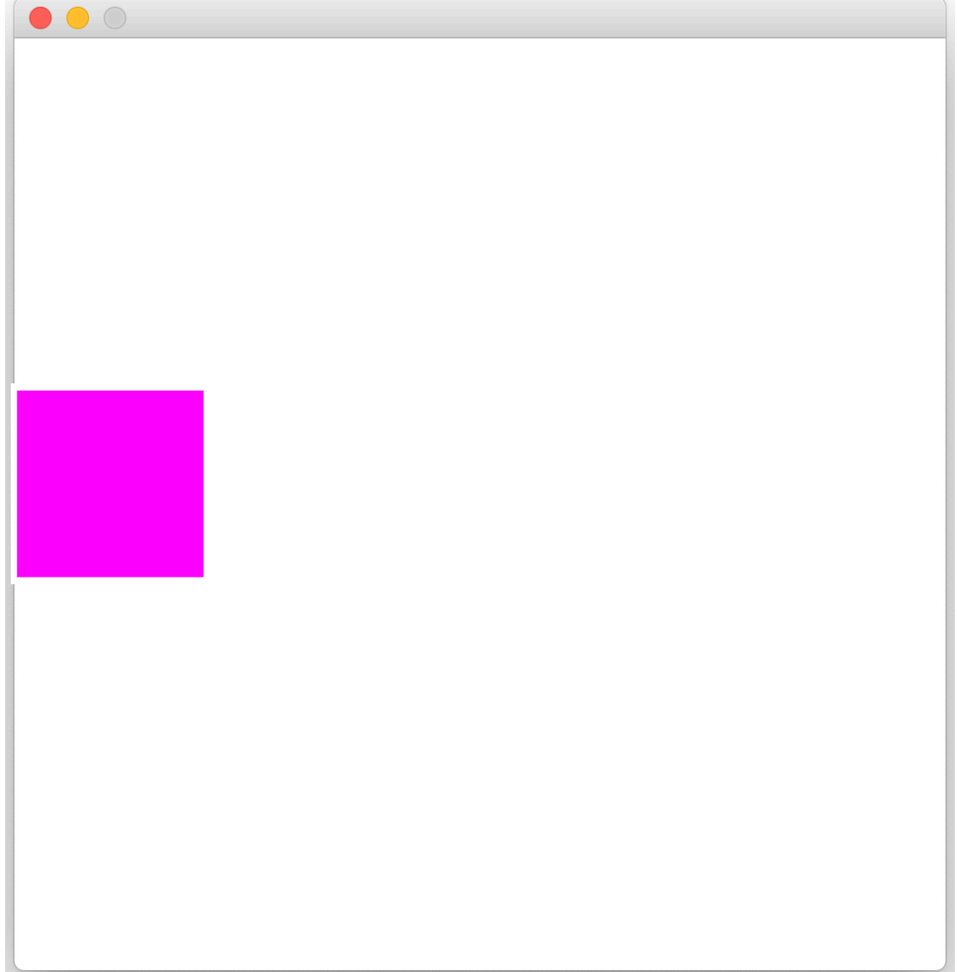

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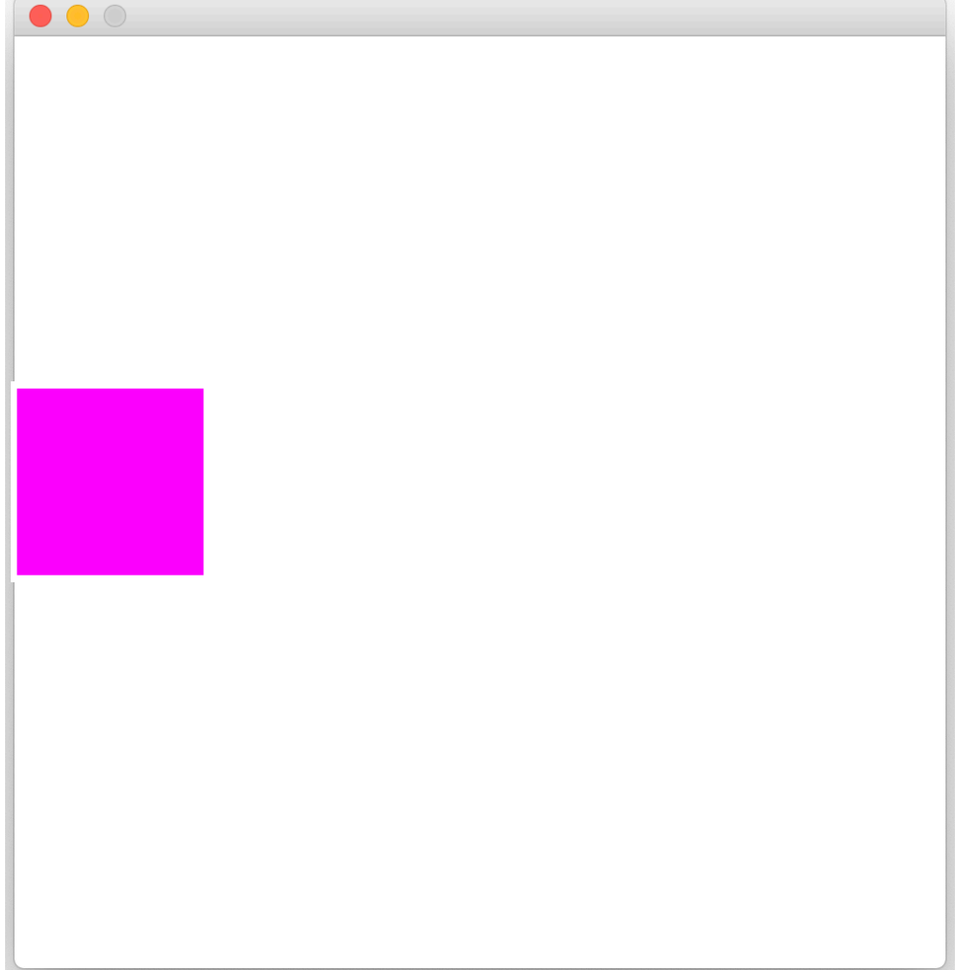

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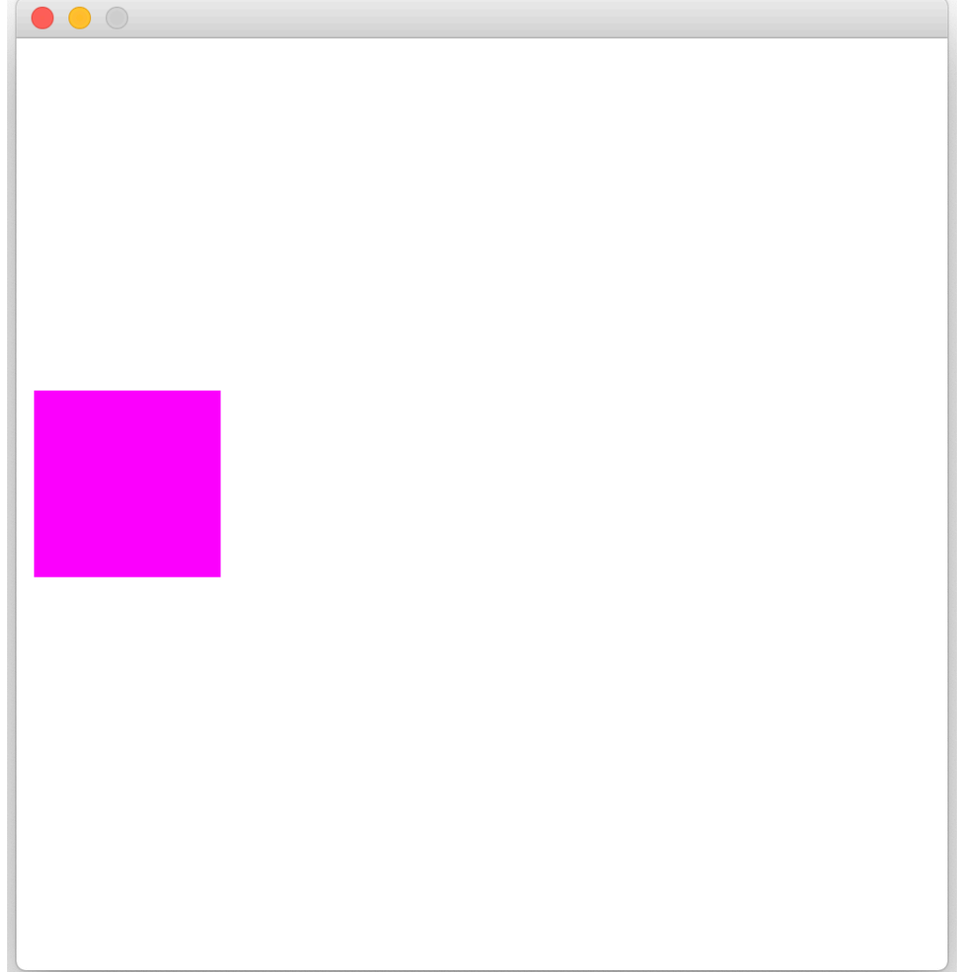

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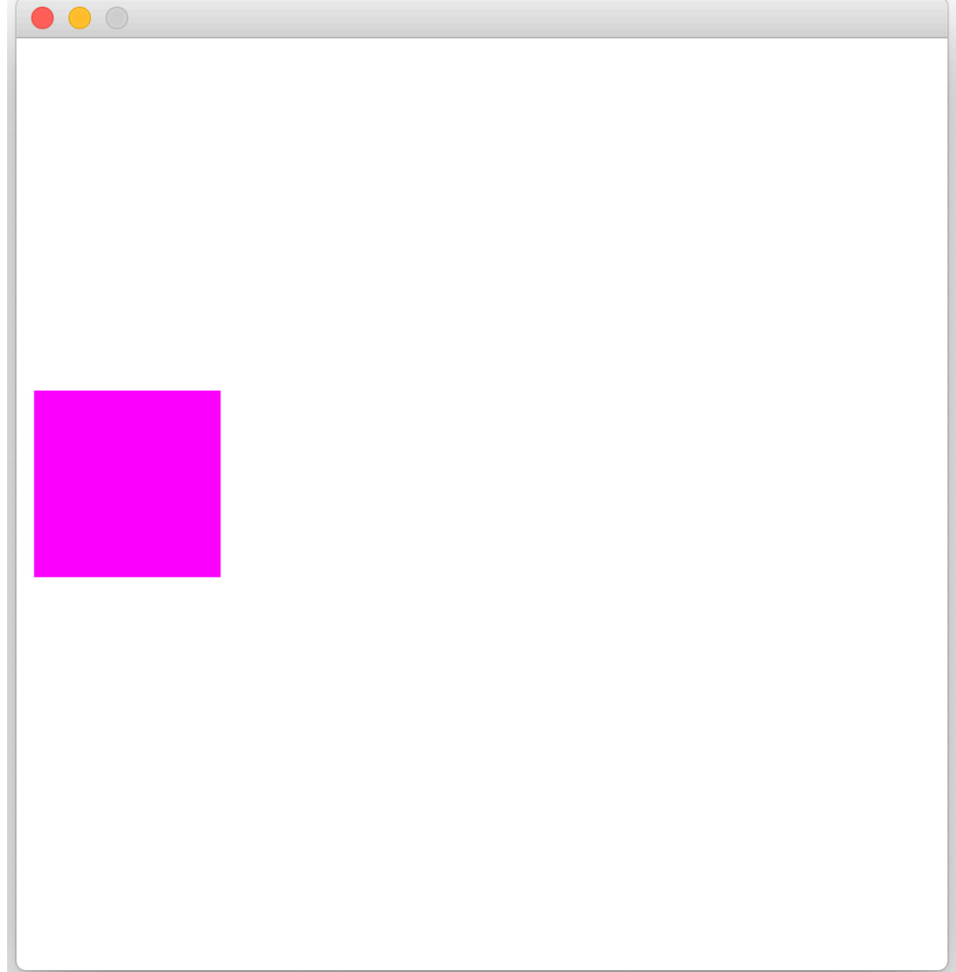

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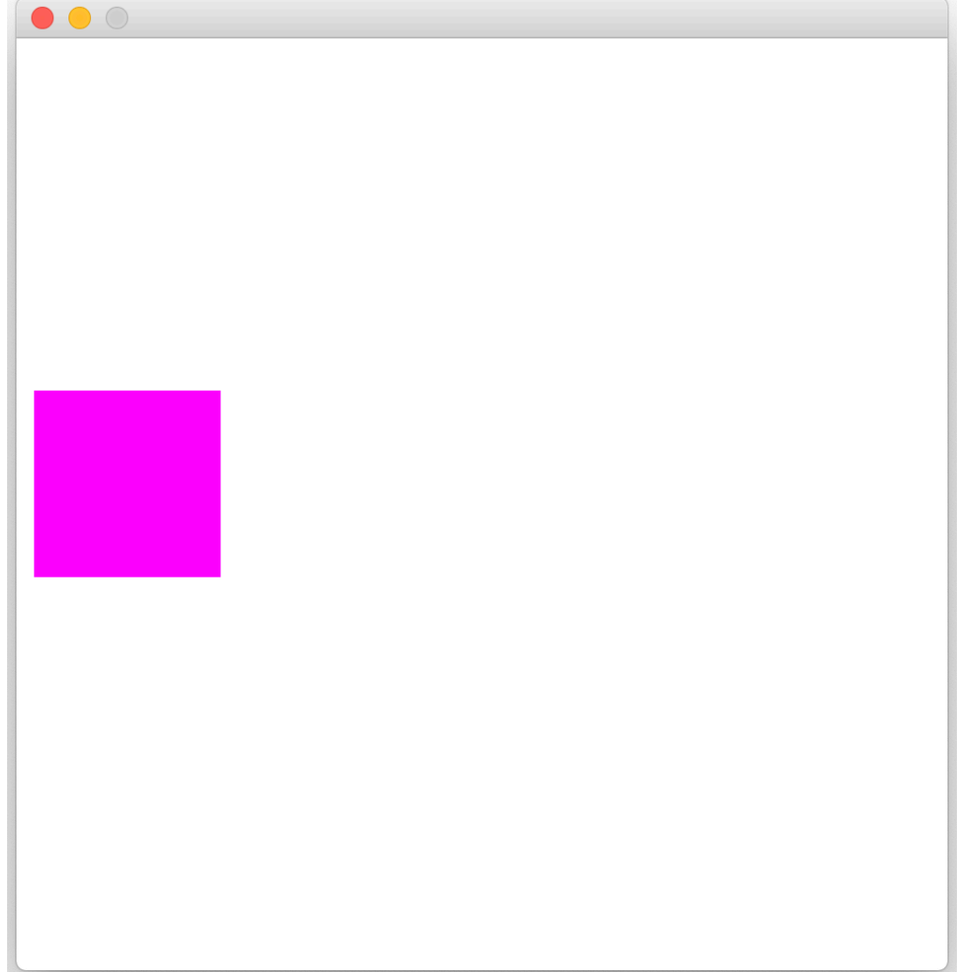

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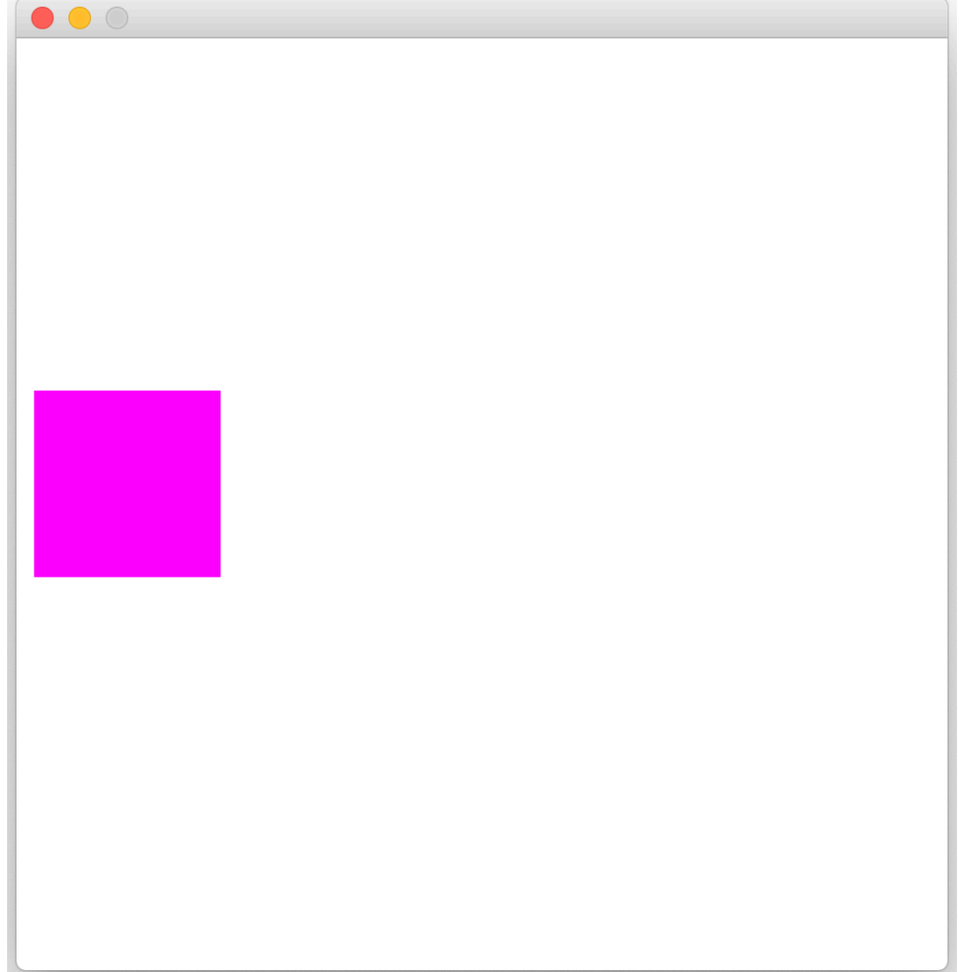

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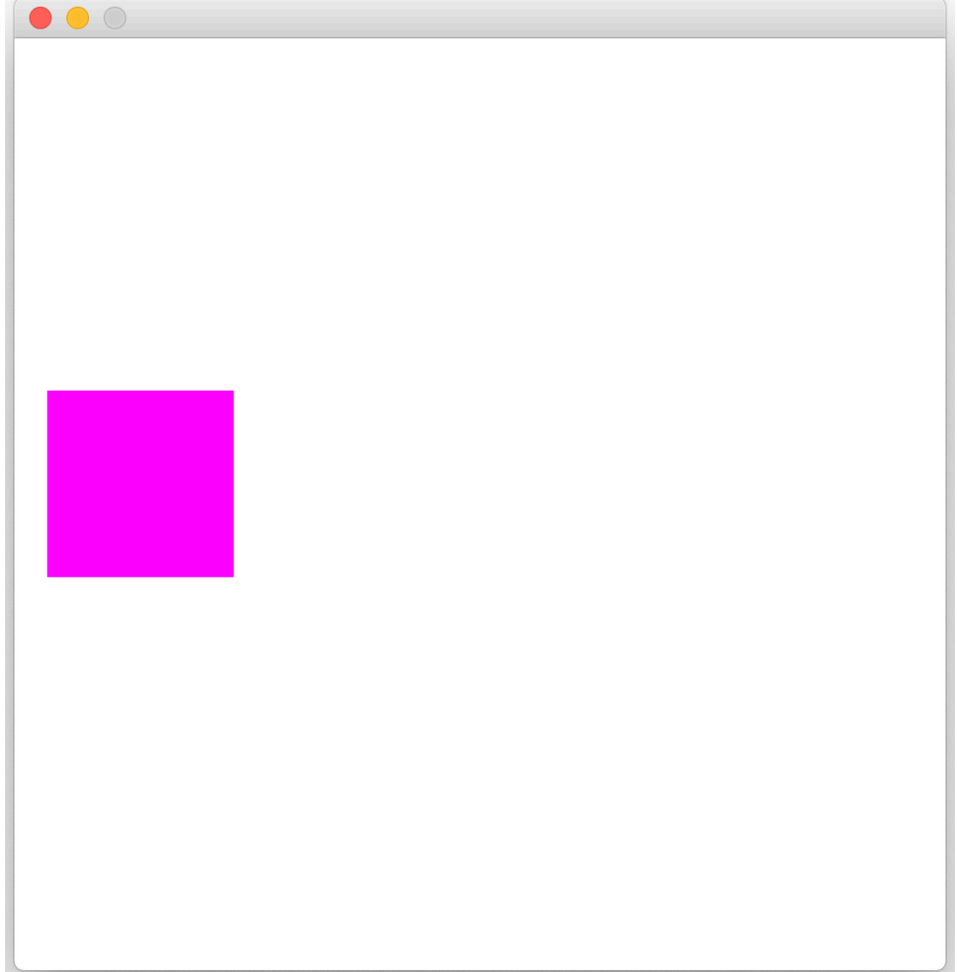

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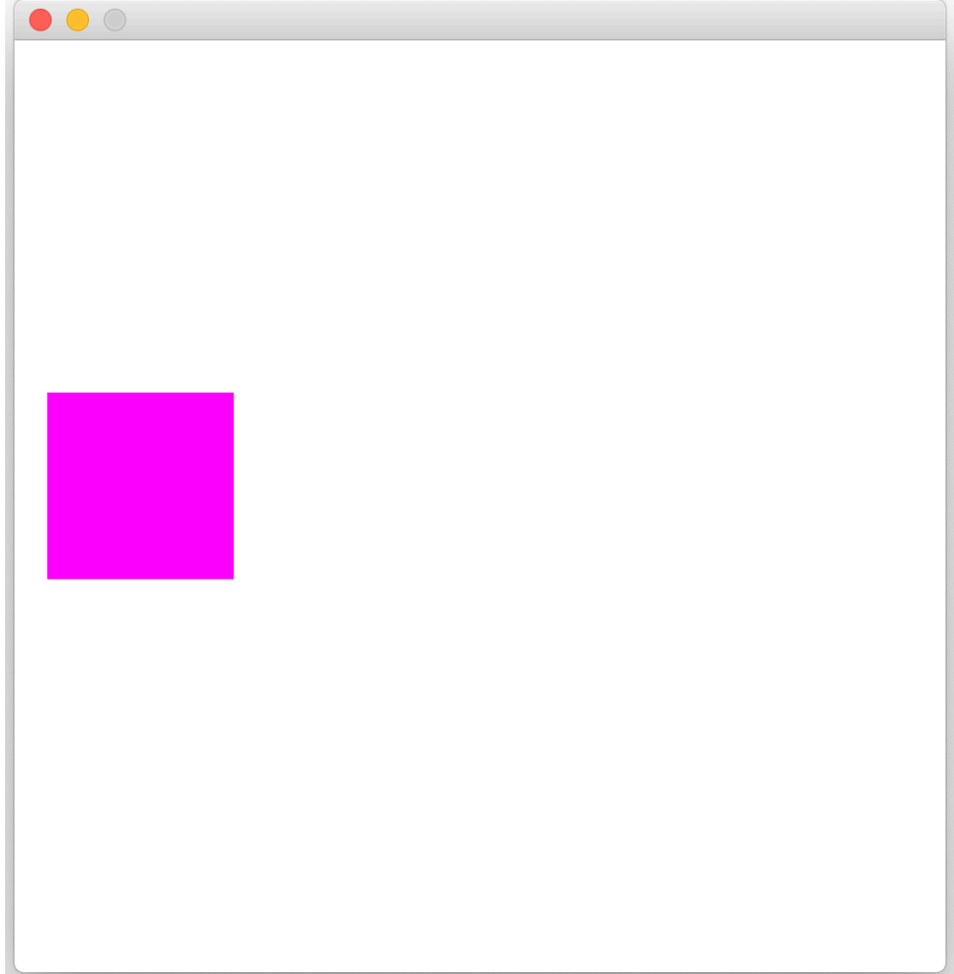

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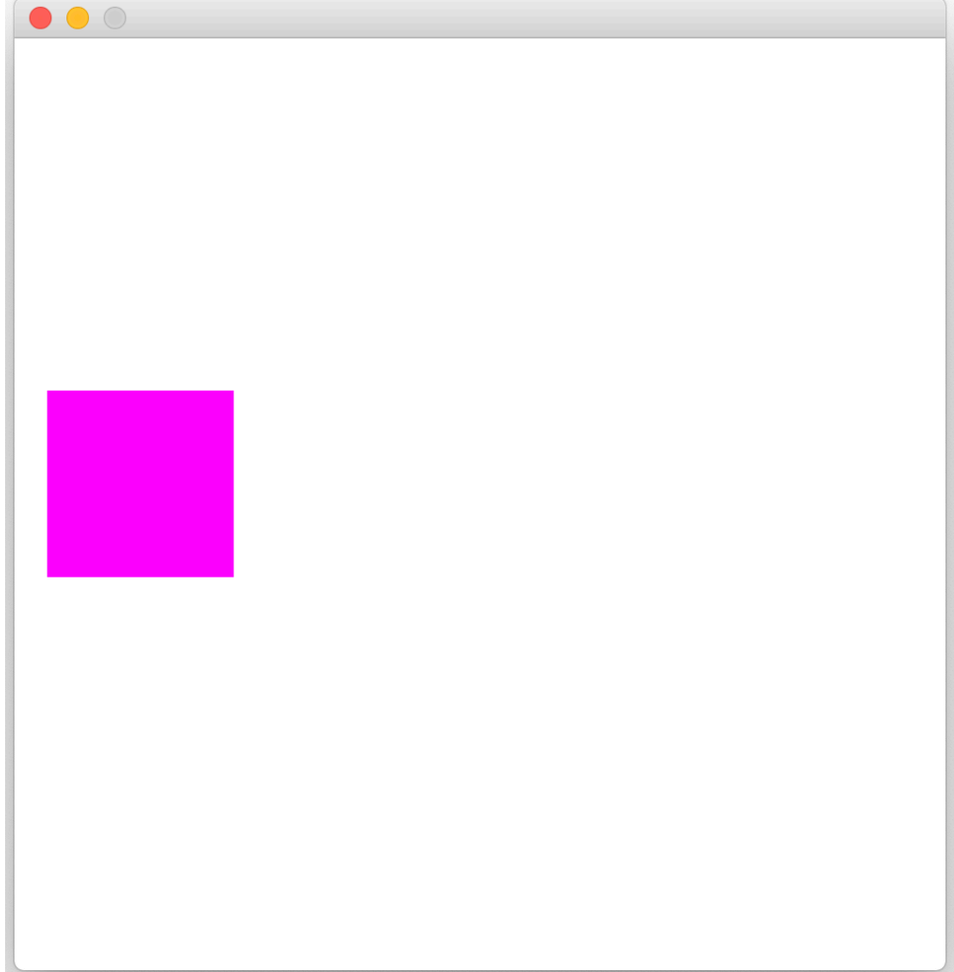

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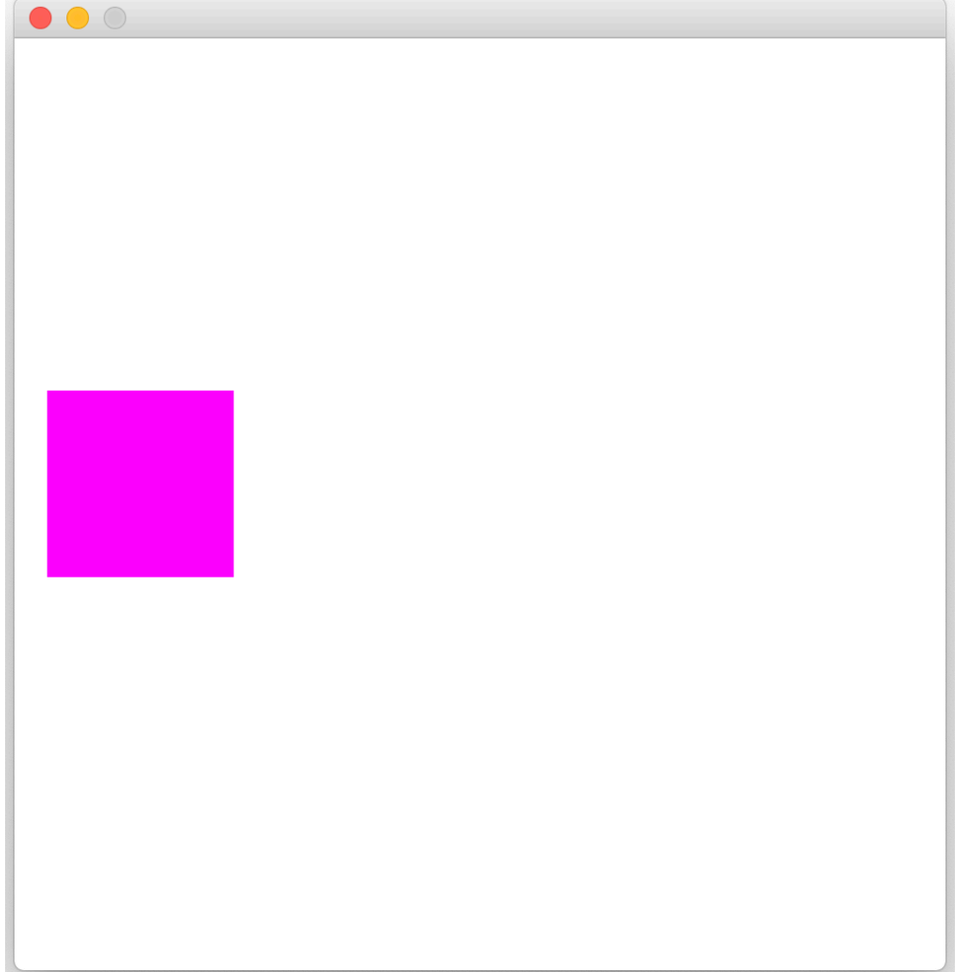

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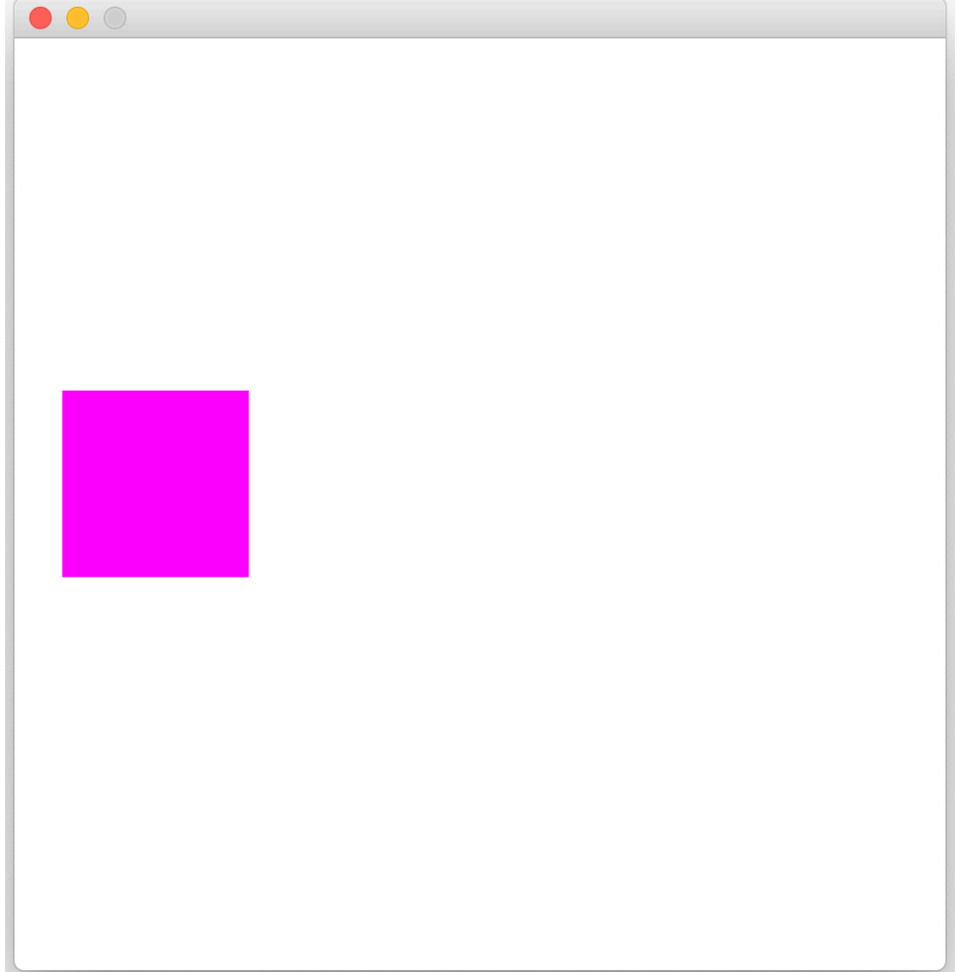

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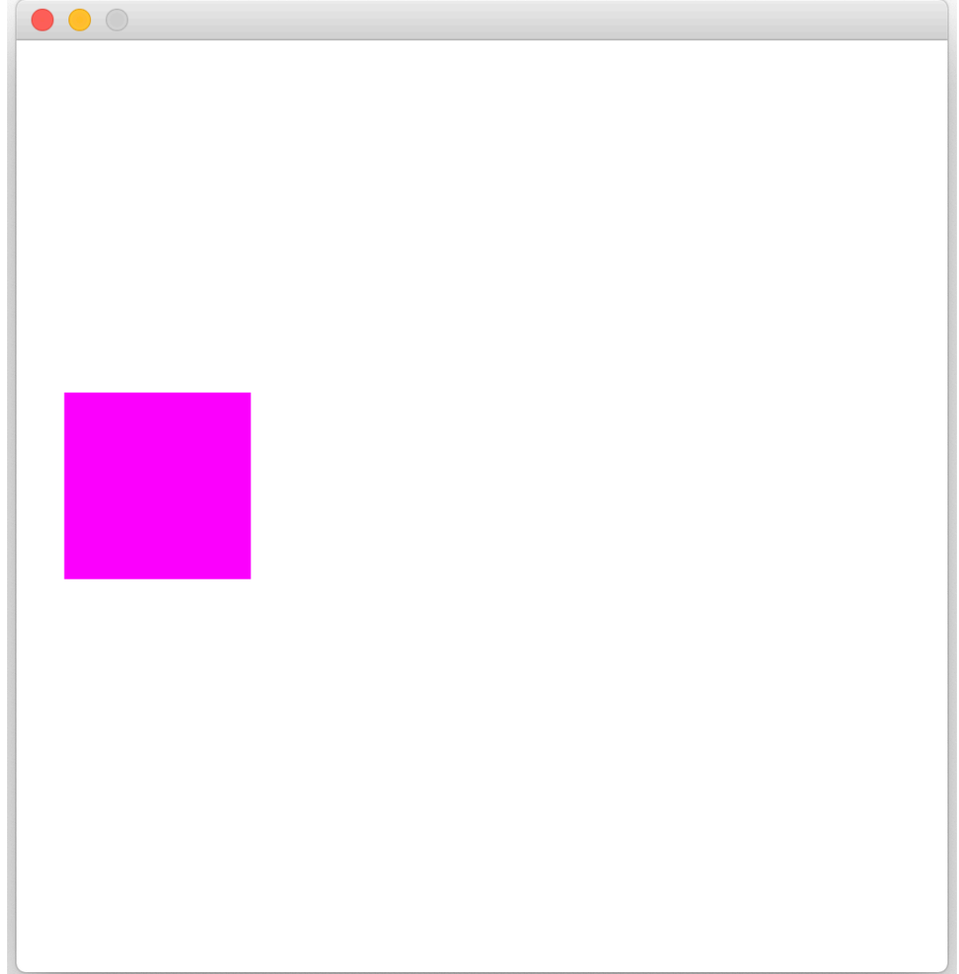

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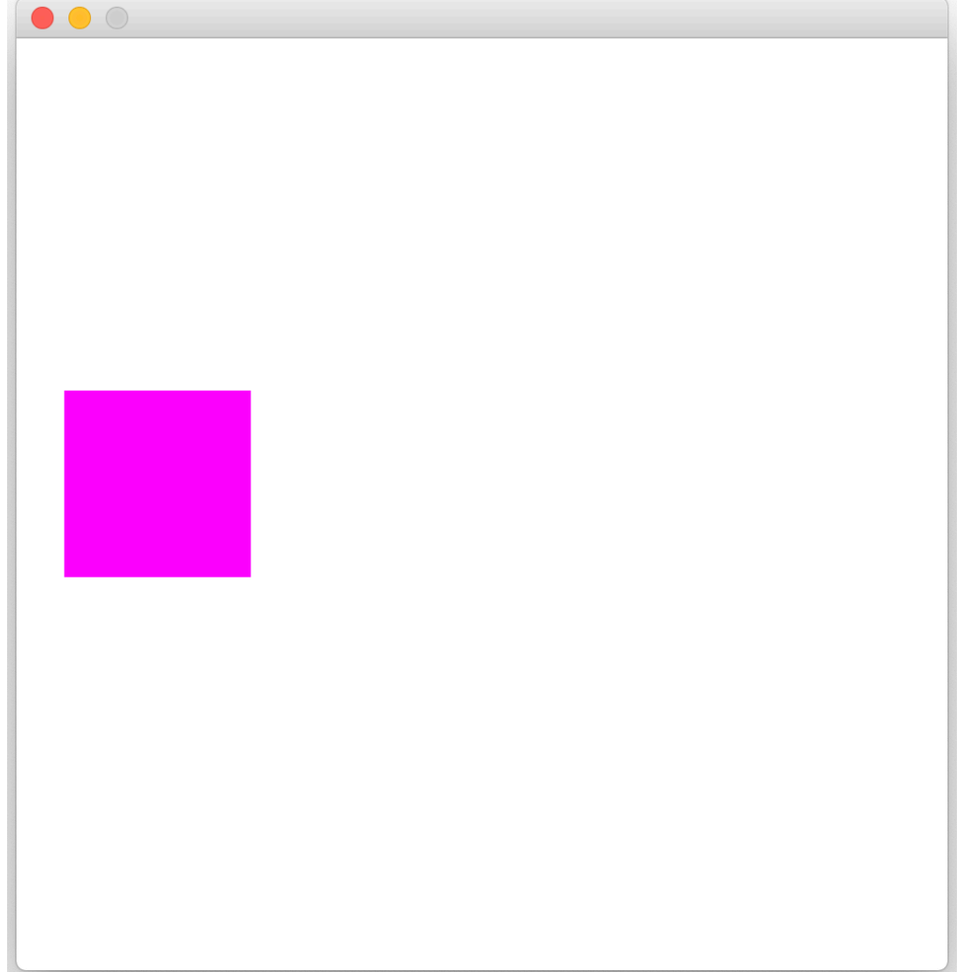

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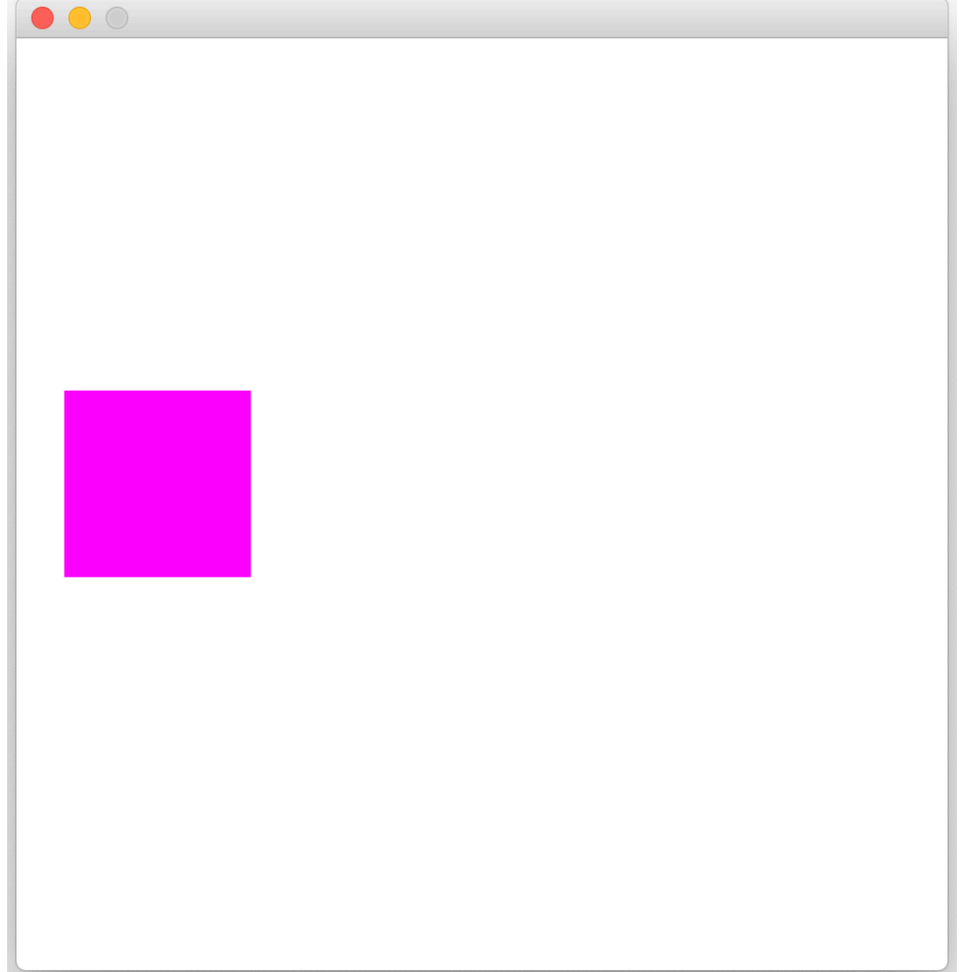

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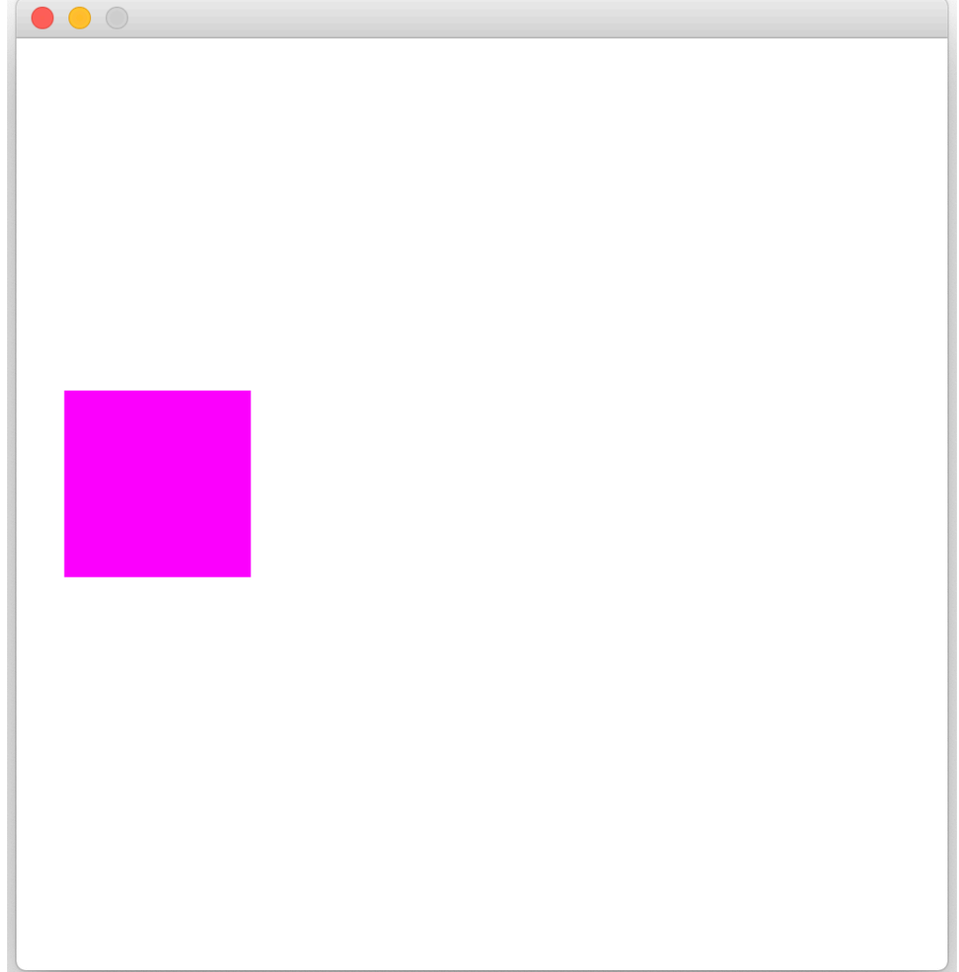

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