

# Python Imaging Library (PIL)

October 2011

Freely available at...

<http://www.pythonware.com/products/pil/>

But...

Not yet implemented for Python 3. (So we use Python 2.)

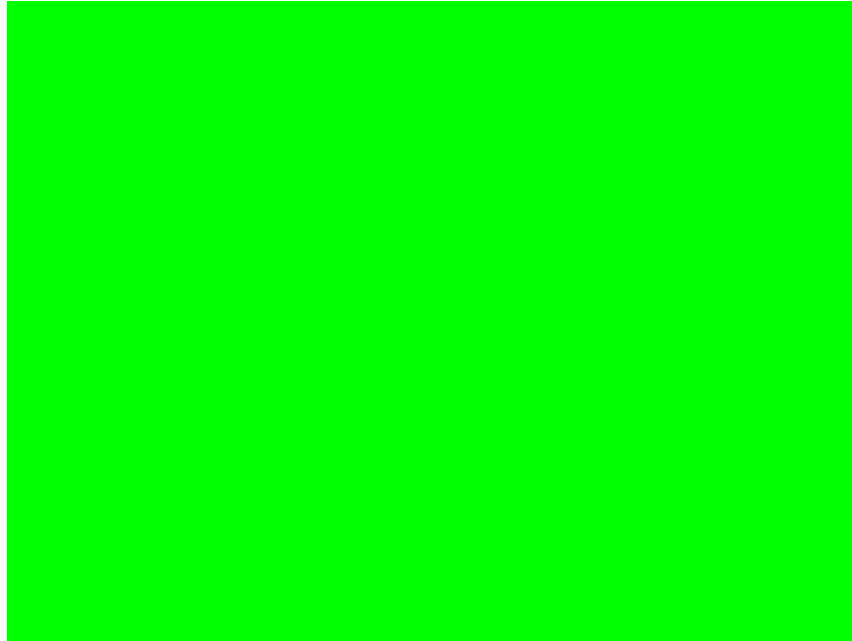
Small Example, file `demo.py`

```
from PIL import Image  
img=Image.new('RGB', (640,480), (0,255,0))  
img.save('green.png')
```

Commands

```
python demo.py  
display green.png
```

Image File



```
lpr -P 115B green.png
```

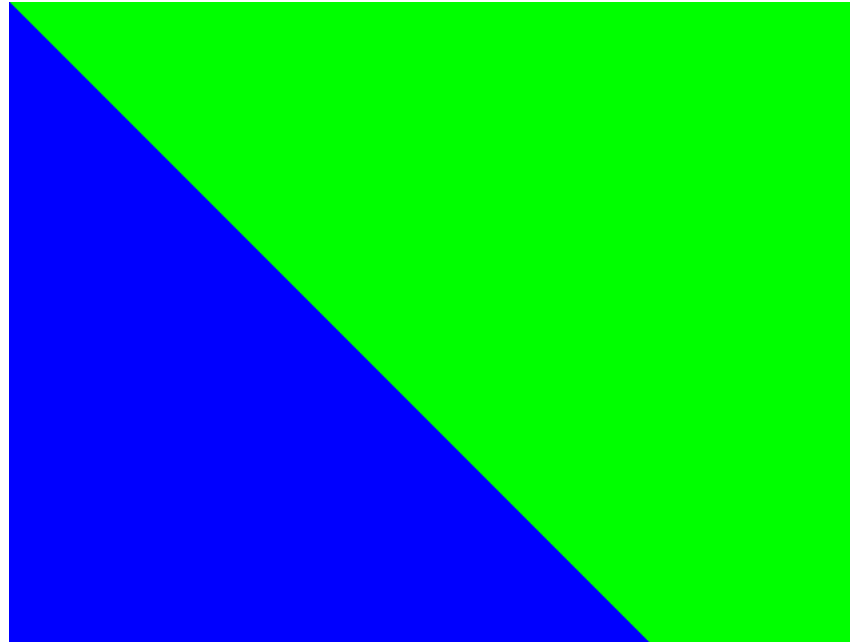
## Loops (1)

```
img=Image.new('RGB', (640,480), (0,0,255))
yp=0
while yp<480:
    xp=0
    while xp<640:
        img.putpixel((xp,yp), (0,255,0))
        xp+=1
    yp+=1
```

## Loops (2)

```
img=Image.new('RGB', (640,480), (0,0,255))
yp=0
while yp<480:
    xp=0
    while xp<640:
        if xp>yp: img.putpixel((xp,yp), (0,255,0))
        xp+=1
    yp+=1
```

## Image File



Note that  $(xp, yp) = (0, 0)$  is the upper-left corner.

## Lab Assignment: Circle Pi

