Note: I am Using Scipy v1.1.0. In case of any errors you can install scipy 1.1.0 by the following command: pip install scipy==1.1.0

In [16]:
```
import scipy
scipy.__version__
```

Out[16]:
```
'1.1.0'
```

To download images Click on this url: https://drive.google.com/drive/folders/1pcaTwofZGfoCxZ3Hv2X6vW6xf_1i88eb?usp=sharing (https://drive.google.com/drive/folders/1pcaTwofZGfoCxZ3Hv2X6vW6xf_1i88eb?usp=sharing)

Import Libraries

In [17]:
```
from skimage import data
from scipy.misc import imread, imresize
import numpy as np
from scipy import ndimage
import matplotlib.pyplot as plt
```

Linear Point Transformation

Formula of Linear Point Transformation is: s=r*c+b

In [18]:
```
c=2
b=32
```

Original Image

In [19]:
```
original_image =imread('sydney.png',True, 'L')    #read image as grey scale image
```

```
C:\ProgramData\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: DeprecationWarning: `imread` is deprecate
d!
`imread` is deprecated in SciPy 1.0.0, and will be removed in 1.2.0.
Use ``imageio.imread`` instead.
  """Entry point for launching an IPython kernel.
```

Processed Image

In [20]:
```
processed_image =original_image.copy()
```

In [21]:
```
#s=c*r+b
processed_image=c*processed_image +b
```

In [22]:
```
#Normalizing Intensity Levels
processed_image[processed_image<0]=0
processed_image[processed_image>256]=256
```

In [23]:
```
fig, axes = plt.subplots(1, 2)
ax = axes.ravel()

ax[0].imshow(original_image,cmap=plt.cm.gray,interpolation='bilinear')
ax[0].set_title("Original")
ax[1].imshow(processed_image, cmap=plt.cm.gray,interpolation='bilinear')
ax[1].set_title("pixel operation")
plt.imshow(processed_image,cmap=plt.cm.gray)
```

Out[23]: <matplotlib.image.AxesImage at 0x182602c3288>