

Geração de Parabolóide Oval

Create the image of a paraboloid with one axis scaled (like an oval paraboloid).

In [1]:

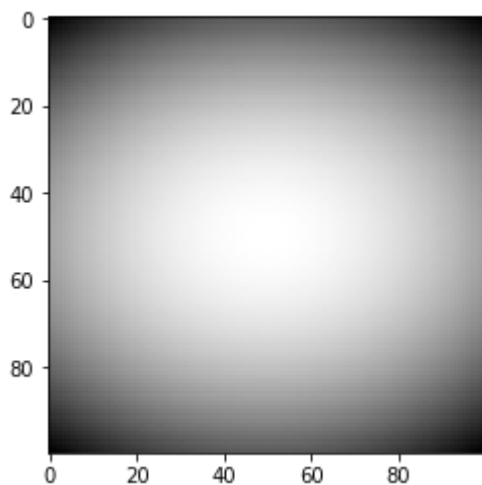
```
#Imports
import numpy as np
import time
import matplotlib.pyplot as plt
%matplotlib inline
```

In [2]:

```
#Image Config
height = 100
width = 100
n = 100
x = np.linspace(-height//2, height//2, n)
y = np.linspace(-width//2, width//2,n)
X, Y = np.meshgrid(x,y)
```

In [4]:

```
# Paraboloid arguments
#
a = 4
b = 3
c = 6
Z = ((X/a)**2 + (Y/b)**2)*c
Z = -Z # Inverting the paraboloid
plt.imshow(Z, cmap = 'gray')
plt.show()
```



In []: