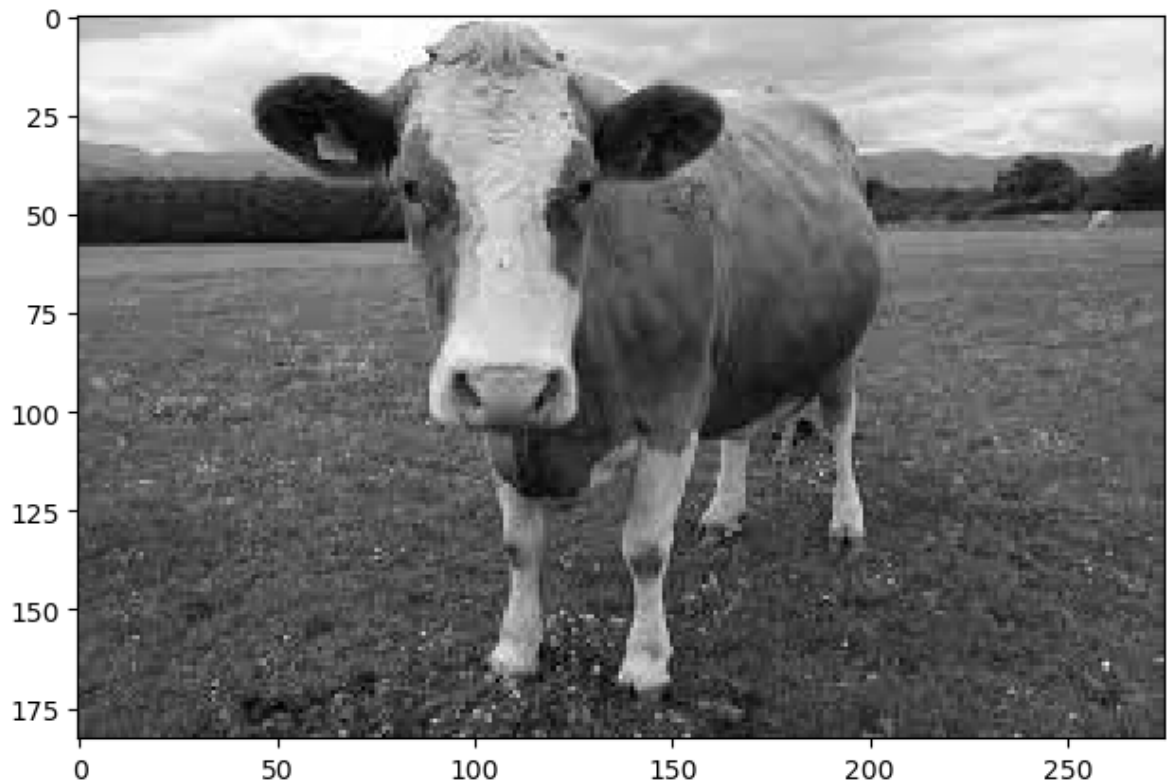


```
In [8]: #Grayscale Pixel Values as Features
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
from skimage.io import imread, imshow

image = imread('b.png', as_gray=True)
imshow(image)
```

Out[8]: <matplotlib.image.AxesImage at 0x183d6940880>



```
In [9]: #checking image shape
image.shape, image
```

Out[9]: ((183, 275),  
array([[0.74479451, 0.74479451, 0.74087294, ..., 0.90800431, 0.90800431,  
0.90800431],  
[0.7330298 , 0.7330298 , 0.7330298 , ..., 0.90800431, 0.90800431,  
0.90800431],  
[0.7307749 , 0.7307749 , 0.7307749 , ..., 0.90800431, 0.90800431,  
0.90800431],  
...,  
[0.33185451, 0.34222039, 0.25903412, ..., 0.26798627, 0.26798627,  
0.27190784],  
[0.29263882, 0.30300471, 0.22374 , ..., 0.27975098, 0.28759412,  
0.29935882],  
[0.25734471, 0.27163216, 0.20021059, ..., 0.24837843, 0.26014314,  
0.27975098]]))

```
In [11]: features = np.reshape(image, (183*275))

features.shape, features
```

```
Out[11]: ((50325,),
          array([0.74479451, 0.74479451, 0.74087294, ..., 0.24837843, 0.26014314,
                0.27975098]))
```

```
In [16]: #Mean Pixel Value of Channels
image = imread('b.png')
image.shape
```

```
Out[16]: (183, 275, 3)
```

```
In [17]: image = imread('b.png')
feature_matrix = np.zeros((183,275))
feature_matrix.shape
```

```
Out[17]: (183, 275)
```

```
In [20]: for i in range(0,image.shape[0]):
          for j in range(0,image.shape[1]):
              feature_matrix[i][j] = ((int(image[i,j,0]) + int(image[i,j,1]) + int(i
```

```
In [22]: features = np.reshape(feature_matrix, (183*275))
features.shape
```

```
Out[22]: (50325,)
```

```
In [ ]:
```