

```

Out[17]: array([[[15, 17, 29],
                  [15, 17, 29],
                  [15, 17, 29],
                  ...,
                  [25, 37, 35],
                  [19, 34, 31],
                  [14, 30, 27]],

                [[15, 17, 29],
                  [15, 17, 29],
                  [15, 17, 29],
                  ...,
                  [26, 38, 36],
                  [22, 37, 34],
                  [20, 36, 33]],

                [[15, 17, 29],
                  [15, 17, 29],
                  [15, 17, 29],
                  ...,
                  [28, 40, 38],
                  [25, 40, 37],
                  [24, 40, 37]],

                ...,

                [[49, 50, 44],
                  [40, 41, 35],
                  [35, 35, 27],
                  ...,
                  [14, 30, 29],
                  [13, 25, 25],
                  [12, 22, 23]],

                [[45, 50, 44],
                  [38, 43, 37],
                  [31, 36, 30],
                  ...,
                  [11, 25, 25],
                  [12, 24, 24],
                  [16, 26, 27]],

                [[31, 41, 33],
                  [31, 41, 33],
                  [32, 39, 32],
                  ...,
                  [14, 26, 26],
                  [16, 26, 27],
                  [23, 31, 33]]], dtype=uint8)

```

```
In [18]: horse_arr == horse_red
```

```

Out[18]: array([[ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True],
                ...,
                [ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True]],

               [[ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True],
                ...,
                [ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True]],

               [[ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True],
                ...,
                [ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True]],

               ...,

               [[ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True],
                ...,
                [ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True]],

               [[ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True],
                ...,
                [ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True]],

               [[ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True],
                ...,
                [ True,  True,  True],
                [ True,  True,  True],
                [ True,  True,  True]])

```

```
In [19]: plt.imshow(horse_red)
```

```
Out[19]: <matplotlib.image.AxesImage at 0x266e201fb90>
```



```
In [20]: horse_red.shape
```

```
Out[20]: (2334, 3502, 3)
```

```
In [21]: plt.imshow(horse_red[:, :, 0])  #(height, width, channels)
```

```
Out[21]: <matplotlib.image.AxesImage at 0x266e20b3050>
```



```
In [22]: horse_red[:, :, 0]
```

```
Out[22]: array([[15, 15, 15, ..., 25, 19, 14],
                [15, 15, 15, ..., 26, 22, 20],
                [15, 15, 15, ..., 28, 25, 24],
                ...,
                [49, 40, 35, ..., 14, 13, 12],
                [45, 38, 31, ..., 11, 12, 16],
                [31, 31, 32, ..., 14, 16, 23]], dtype=uint8)
```

```
In [23]: horse_red[:, :, 0].shape
```

```
Out[23]: (2334, 3502)
```

```
In [24]: plt.imshow(horse_red[:, :, 0], cmap='Greys')
```

```
Out[24]: <matplotlib.image.AxesImage at 0x266e2921f70>
```



```
In [25]: plt.imshow(horse_red[:, :, 1], cmap='grey')
```

```
Out[25]: <matplotlib.image.AxesImage at 0x266e297bf80>
```



```
In [26]: plt.imshow(horse_red[:, :, 1], cmap= 'gray')
```

```
Out[26]: <matplotlib.image.AxesImage at 0x266e29be750>
```



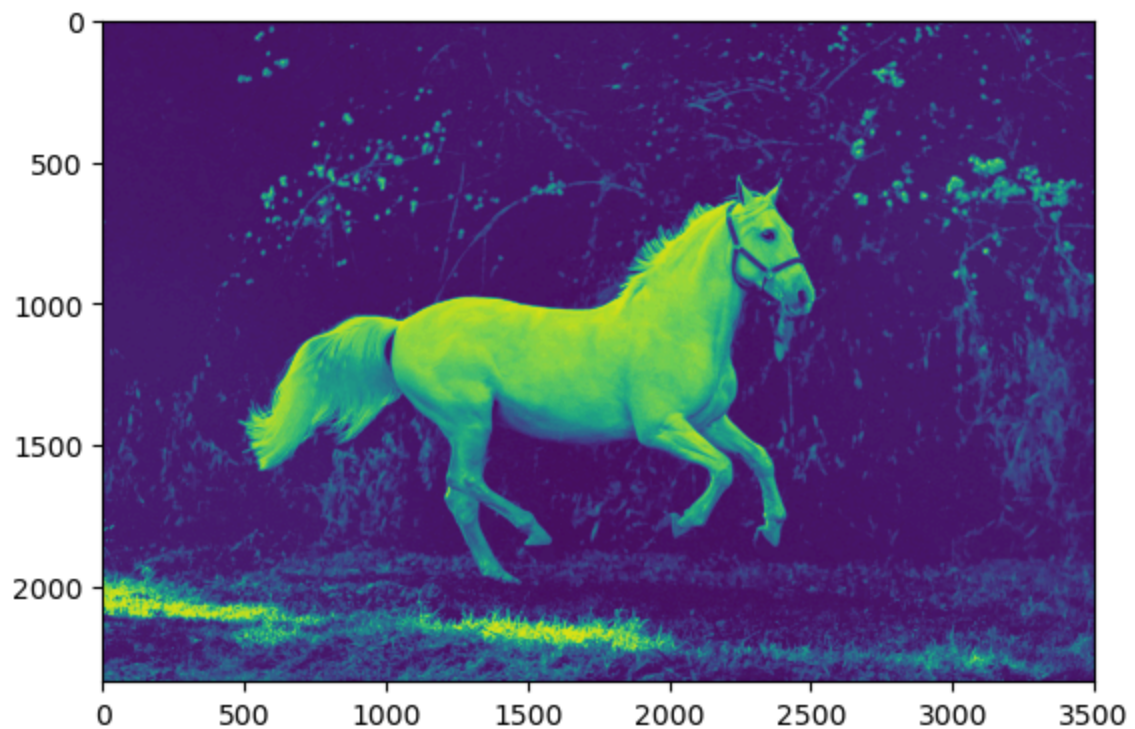
```
In [27]: plt.imshow(horse_red[:, :, :], cmap='gray')
```

```
Out[27]: <matplotlib.image.AxesImage at 0x266e0fee870>
```




```
In [28]: plt.imshow(horse_red[:, :, 0])
```

```
Out[28]: <matplotlib.image.AxesImage at 0x266e2a66750>
```



```
In [29]: plt.imshow(horse_red[:, :, :])
```

```
Out[29]: <matplotlib.image.AxesImage at 0x266e21344a0>
```