# How to read image

In [4]:
```
from PIL import Image
```

In [8]:
```
horse_img = Image.open(r'C:\Users\Acer\Desktop\horse.jpg') #r is referring for a
```

In [7]:
```
horse_img
```

Out[7]:

In [9]:
```
type(horse_img)
```

Out[9]: PIL.JpegImagePlugin.JpegImageFile

In [10]:
```
import numpy as np
```

In [11]:
```
horse_arr=np.asarray(horse_img)
```

In [14]:
```
horse_arr #array ranges from 0 - 255
```

Out[14]:
```
array([[[239, 255, 255],
        [238, 254, 254],
        [240, 254, 255],
        ...,
        [236, 202, 104],
        [218, 194,  86],
        [199, 178,  73]],

       [[238, 254, 254],
        [238, 254, 254],
        [238, 254, 254],
        ...,
        [255, 216, 115],
        [242, 213, 111],
        [211, 194,  80]],

       [[239, 253, 254],
        [239, 253, 254],
        [238, 254, 254],
        ...,
        [251, 219, 118],
        [242, 217, 125],
        [204, 189,  96]],

       ...,

       [[181, 168, 134],
        [175, 159, 126],
        [181, 159, 120],
        ...,
        [167, 161, 111],
        [174, 162, 114],
        [171, 165, 115]],

       [[190, 177, 143],
        [169, 159, 123],
        [179, 164, 125],
        ...,
        [168, 161, 119],
        [166, 163, 112],
        [172, 169, 116]],

       [[200, 190, 155],
        [179, 177, 129],
        [162, 160, 122],
        ...,
        [152, 138, 112],
        [166, 165, 121],
        [179, 177, 128]]], shape=(800, 610, 3), dtype=uint8)
```

In [13]:
```
type(horse_arr)
```

Out[13]:
```
numpy.ndarray
```

In [15]:
```
import matplotlib.pyplot as plt
```

In [16]:
```
plt.imshow(horse_img)
```

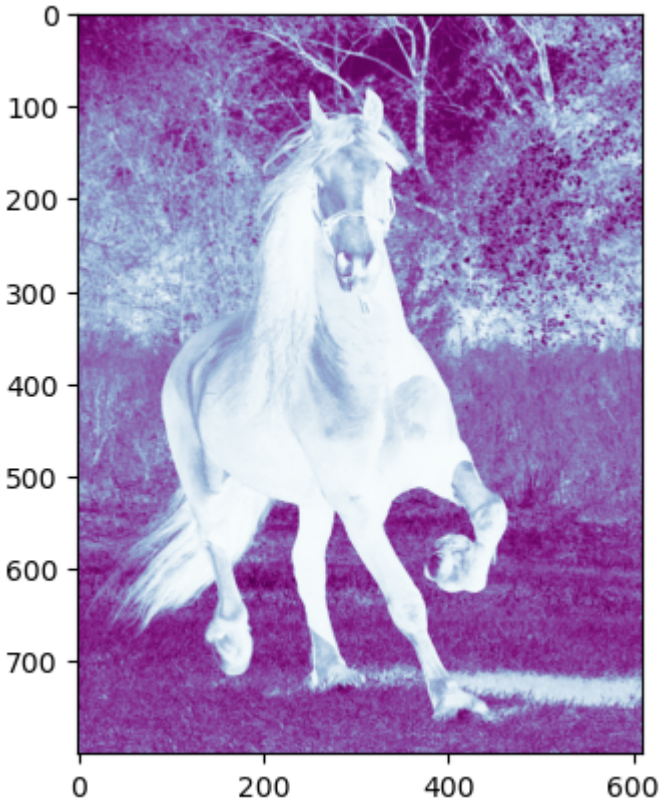
Out[16]:
```
<matplotlib.image.AxesImage at 0x238bc1e7230>
```


In [17]:
```
horse_arr.shape
```

Out[17]:
```
(800, 610, 3)
```

In [20]:
```
plt.imshow(horse_arr[:,:,0],cmap='BuPu') #to change the color of image
```

Out[20]:
```
<matplotlib.image.AxesImage at 0x238bcb3ed50>
```




In [ ]: