```
import cv2
img=cv2.imread('/content/TELETUBBIE.jfif')
img
```

```
array([[[245, 243, 242],
        [245, 243, 242],
        [245, 243, 242],
        ...,
        [250, 246, 245],
        [248, 246, 246],
        [248, 246, 246]],

       [[245, 243, 242],
        [245, 243, 242],
        [245, 243, 242],
        ...,
        [250, 246, 245],
        [248, 246, 246],
        [248, 246, 246]],

       [[246, 244, 243],
        [246, 244, 243],
        [246, 244, 243],
        ...,
        [250, 246, 245],
        [248, 246, 245],
        [248, 246, 245]],

       ...,

       [[ 98, 143, 100],
        [ 98, 142, 101],
        [102, 147, 108],
        ...,
        [101, 145, 109],
        [ 94, 137, 104],
        [ 94, 137, 104]],

       [[ 98, 143, 100],
        [ 98, 142, 101],
        [102, 146, 109],
        ...,
        [ 98, 142, 106],
        [ 87, 129,  94],
        [ 87, 129,  94]],

       [[104, 149, 106],
        [102, 146, 105],
        [105, 149, 112],
        ...,
        [100, 144, 108],
        [ 98, 138, 103],
        [ 98, 138, 103]]], dtype=uint8)
```

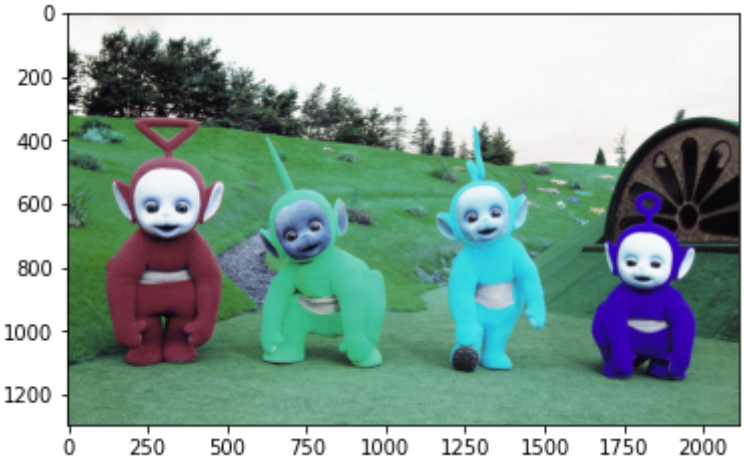
```
#rgb
img.shape
```

```
(1294, 2114, 3)
```

```
import matplotlib.pyplot as plt
import cv2
```

```
plt.imshow(img)
```

```
<matplotlib.image.AxesImage at 0x7f71cf6f34d0>
```




```
#BGR INTO RGB
rev_image=img[:,:,::-1]
rev_image
```

```
array([[[242, 243, 245],
        [242, 243, 245],
        [242, 243, 245],
        ...,
        [245, 246, 250],
        [246, 246, 248],
        [246, 246, 248]],

       [[242, 243, 245],
        [242, 243, 245],
        [242, 243, 245],
        ...,
        [245, 246, 250],
        [246, 246, 248],
        [246, 246, 248]],

       [[243, 244, 246],
        [243, 244, 246],
        [243, 244, 246],
        ...,
        [245, 246, 250],
        [245, 246, 248],
        [245, 246, 248]],

       ...,

       [[100, 143,  98],
        [101, 142,  98],
        [108, 147, 102],
        ...,
        [109, 145, 101],
```

```
       [104, 137,  94],
       [104, 137,  94]],

      [[100, 143,  98],
       [101, 142,  98],
       [109, 146, 102],
       ...,
       [106, 142,  98],
       [ 94, 129,  87],
       [ 94, 129,  87]],

      [[106, 149, 104],
       [105, 146, 102],
       [112, 149, 105],
       ...,
       [108, 144, 100],
       [103, 138,  98],
       [103, 138,  98]]], dtype=uint8)
```

```
def show_image(img_arr):
  rgb_arr=cv2.cvtColor(img_arr,cv2.COLOR_BGR2RGB)
  plt.imshow(rgb_arr)
  plt.axis(False)
```

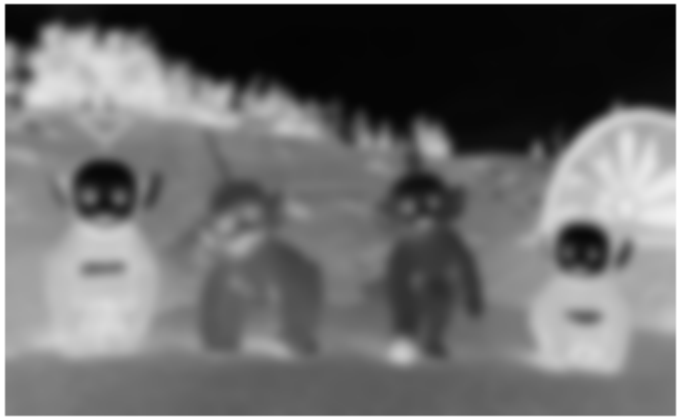
```
gray_img=cv2.cvtColor(img,cv2.COLOR_BGR2GRAY)
show_image(gray_img)
```

```
gray_img
```

```
array([[243, 243, 243, ..., 246, 246, 246],
       [243, 243, 243, ..., 246, 246, 246],
       [244, 244, 244, ..., 246, 246, 246],
       ...,
       [125, 125, 130, ..., 129, 122, 122],
       [125, 125, 130, ..., 126, 114, 114],
       [131, 129, 133, ..., 128, 123, 123]], dtype=uint8)
```

```
show_image(255-gray_img)
inverted_image=255-gray_img
```

```
blur_image=cv2.GaussianBlur(inverted_image,(111,111),0)
show_image(blur_image)
```



```
sketch=cv2.divide(blur_image,inverted_image,scale=256.0)
show_image(sketch)
```

✓ 1s completed at 20:57