In [33]:
```
import numpy as np
```

In [34]:
```
import matplotlib.pyplot as plt
```

In [35]:
```
%matplotlib inline
```

In [36]:
```
from PIL import Image
```

In [37]:
```
Babu1=Image.open(r"C:\Users\SHAIK BASHEER\OneDrive\Pictures\Basheer photos\Babu1.jpg")
```

In [38]:
```
Babu1
```

Out[38]:

In [39]:
```
type(Babu1)
```

Out[39]:
```
PIL.JpegImagePlugin.JpegImageFile
```

In [40]:
```
Babu1_arr=np.asarray(Babu1)
```

In [41]:
```
Babu1_arr
```

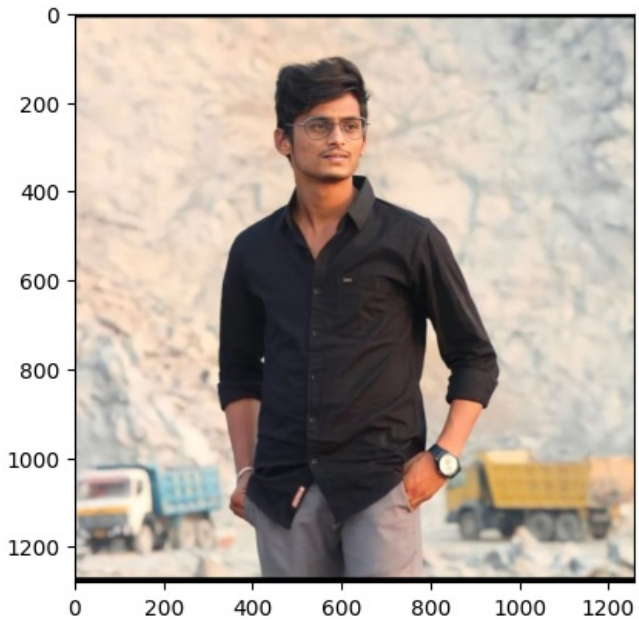
Out[41]:
```
array([[[19, 13, 15],
        [12,  6,  8],
        [ 7,  1,  3],
        ...,
        [ 3,  3,  3],
        [11, 11, 11],
        [13, 13, 13]],

       [[18, 12, 14],
        [11,  5,  7],
        [ 6,  0,  2],
        ...,
        [ 3,  3,  3],
        [ 9,  9,  9],
        [11, 11, 11]],

       [[15, 11, 12],
        [ 8,  4,  5],
        [ 4,  0,  1],
        ...,
        [ 2,  2,  2],
        [ 8,  6,  7],
        [10,  8,  9]],

       ...,

       [[18, 18, 18],
        [ 4,  4,  4],
        [ 0,  0,  0],
        ...,
        [ 2,  4,  3],
        [ 7,  9,  6],
        [ 9, 11,  8]],

       [[22, 22, 24],
        [ 8,  8, 10],
        [ 3,  3,  5],
        ...,
        [ 5,  7,  4],
        [12, 12, 10],
        [14, 15, 10]],

       [[27, 27, 29],
        [13, 13, 15],
        [ 8,  8, 10],
        ...,
        [10, 12,  9],
        [17, 18, 13],
        [19, 20, 15]]], dtype=uint8)
```

In [42]:
```
type(Babu1_arr)
```

Out[42]:
```
numpy.ndarray
```

In [43]:
```
plt.imshow(Babu1_arr)
```

Out[43]:
```
<matplotlib.image.AxesImage at 0x2330d4886b0>
```



In [44]:
```
Babu1_arr.shape
```

Out[44]:
```
(1280, 1258, 3)
```

In [45]:
```
Babu1_red=Babu1_arr.copy()
```

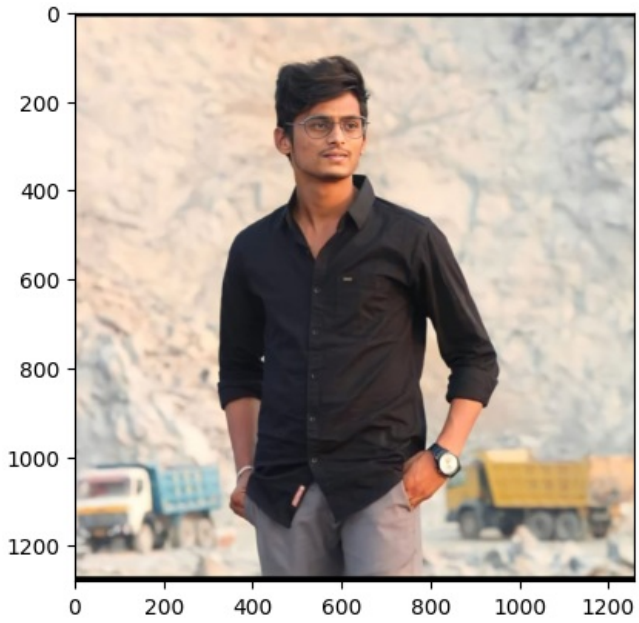
In [46]:
```
Babu1_red
```

Out[46]:
```
array([[[19, 13, 15],
        [12,  6,  8],
        [ 7,  1,  3],
        ...,
        [ 3,  3,  3],
        [11, 11, 11],
        [13, 13, 13]],

       [[18, 12, 14],
        [11,  5,  7],
        [ 6,  0,  2],
        ...,
        [ 3,  3,  3],
        [ 9,  9,  9],
        [11, 11, 11]],

       [[15, 11, 12],
        [ 8,  4,  5],
        [ 4,  0,  1],
        ...,
        [ 2,  2,  2],
        [ 8,  6,  7],
        [10,  8,  9]],

       ...,

       [[18, 18, 18],
        [ 4,  4,  4],
        [ 0,  0,  0],
        ...,
        [ 2,  4,  3],
        [ 7,  9,  6],
        [ 9, 11,  8]],

       [[22, 22, 24],
        [ 8,  8, 10],
        [ 3,  3,  5],
        ...,
        [ 5,  7,  4],
        [12, 12, 10],
        [14, 15, 10]],

       [[27, 27, 29],
        [13, 13, 15],
        [ 8,  8, 10],
        ...,
        [10, 12,  9],
        [17, 18, 13],
        [19, 20, 15]]], dtype=uint8)
```

In [47]:
```
Babu1_red=Babu1_arr
```

In [48]:
```
plt.imshow(Babu1_red)
```

Out[48]:
```
<matplotlib.image.AxesImage at 0x2330bf9ba70>
```

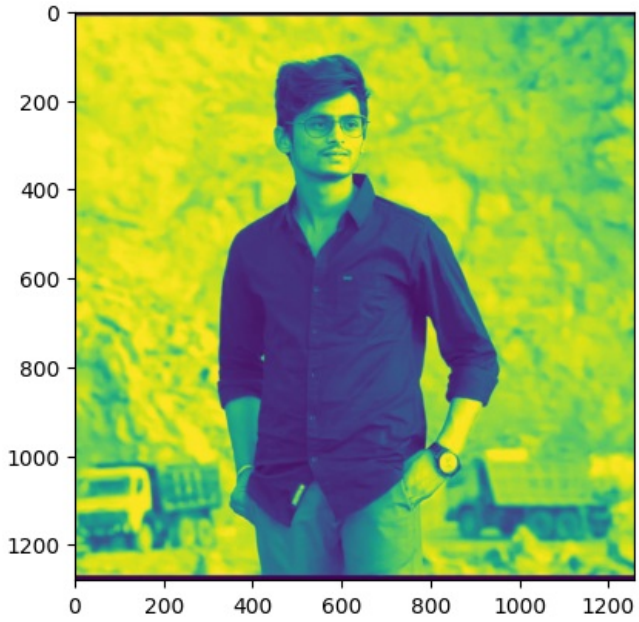


In [49]:
```
Babu1_red.shape
```

Out[49]:
```
(1280, 1258, 3)
```

In [50]:
```
plt.imshow(Babu1_red[:,:,0])
```

Out[50]:
```
<matplotlib.image.AxesImage at 0x233054b5340>
```

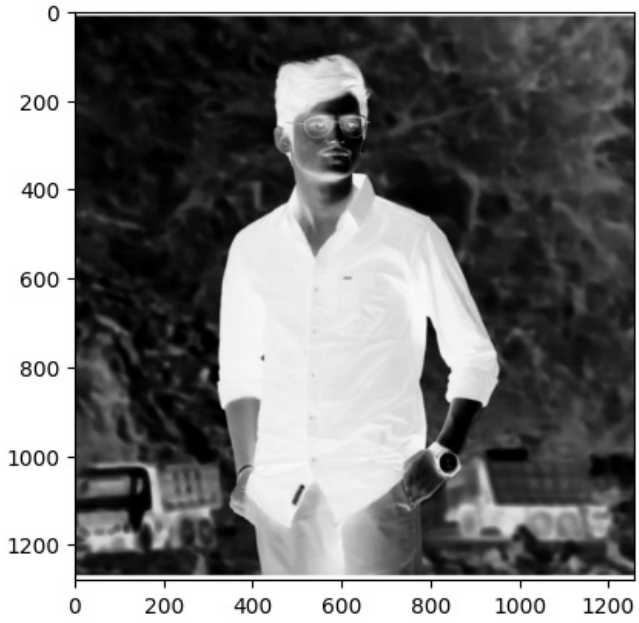


In [51]:
```
Babu1_red[:,:,0]
```

Out[51]:
```
array([[19, 12,  7, ...,  3, 11, 13],
       [18, 11,  6, ...,  3,  9, 11],
       [15,  8,  4, ...,  2,  8, 10],
       ...,
       [18,  4,  0, ...,  2,  7,  9],
       [22,  8,  3, ...,  5, 12, 14],
       [27, 13,  8, ..., 10, 17, 19]], dtype=uint8)
```

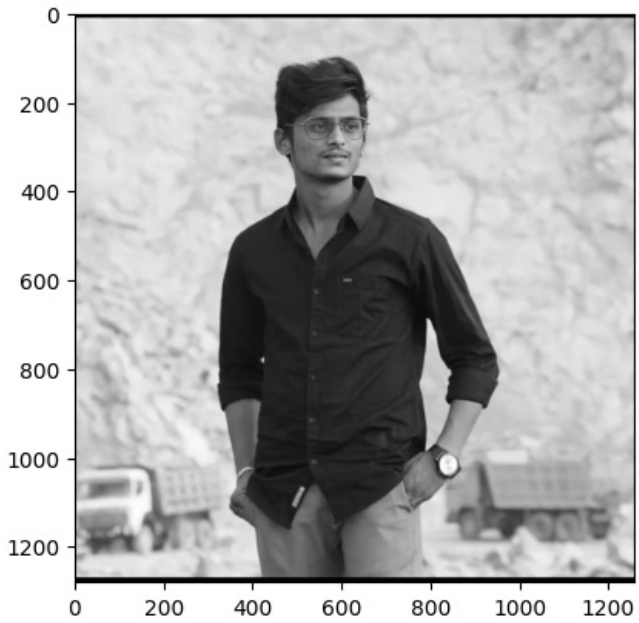
In [52]:
```
plt.imshow(Babu1_red[:,:,0], cmap='Greys')
```

Out[52]:
```
<matplotlib.image.AxesImage at 0x233052c41a0>
```



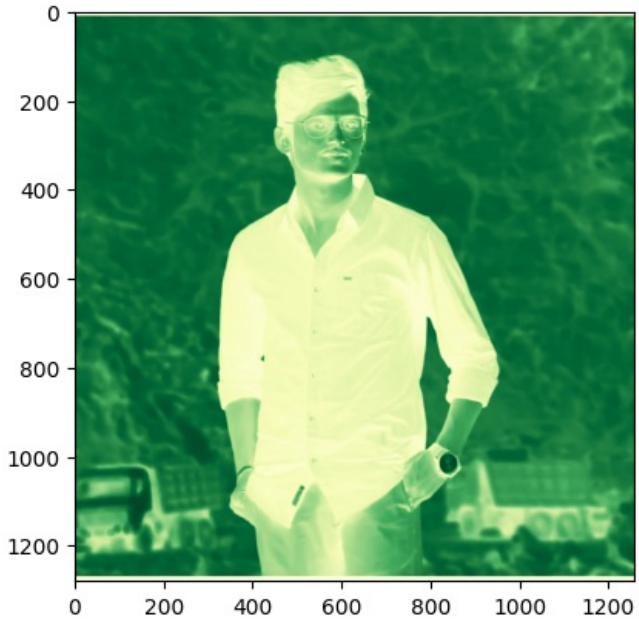
In [53]:
```
plt.imshow(Babu1_red[:,:,1],cmap='grey')
```

Out[53]:
```
<matplotlib.image.AxesImage at 0x23305318cb0>
```



In [54]:
```
plt.imshow(Babu1_red[:,:,1], cmap='YlGn')
```

Out[54]:
```
<matplotlib.image.AxesImage at 0x233051d4350>
```



In [55]:
```
Babu1_red[:,:,0]
```

Out[55]:
```
array([[19, 12,  7, ...,  3, 11, 13],
       [18, 11,  6, ...,  3,  9, 11],
       [15,  8,  4, ...,  2,  8, 10],
       ...,
       [18,  4,  0, ...,  2,  7,  9],
       [22,  8,  3, ...,  5, 12, 14],
       [27, 13,  8, ..., 10, 17, 19]], dtype=uint8)
```

In [56]:
```
Babu1_red[:,:,1]
```

Out[56]:
```
array([[13,  6,  1, ...,  3, 11, 13],
       [12,  5,  0, ...,  3,  9, 11],
       [11,  4,  0, ...,  2,  6,  8],
       ...,
       [18,  4,  0, ...,  4,  9, 11],
       [22,  8,  3, ...,  7, 12, 15],
       [27, 13,  8, ..., 12, 18, 20]], dtype=uint8)
```

In [57]:
```
Babu1_red[:,:,2]
```

Out[57]:
```
array([[15,  8,  3, ...,  3, 11, 13],
       [14,  7,  2, ...,  3,  9, 11],
       [12,  5,  1, ...,  2,  7,  9],
       ...,
       [18,  4,  0, ...,  3,  6,  8],
       [24, 10,  5, ...,  4, 10, 10],
       [29, 15, 10, ...,  9, 13, 15]], dtype=uint8)
```

In [60]:
```
Babu1_red[:,:,1]
```

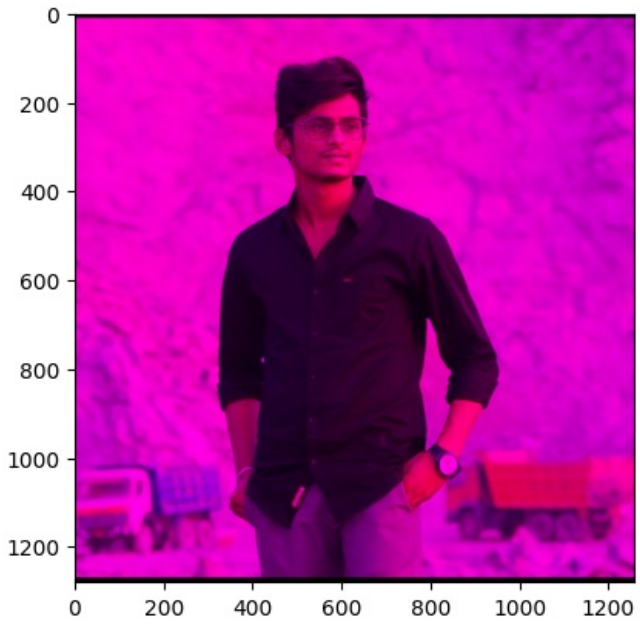
Out[60]:
```
array([[13,  6,  1, ...,  3, 11, 13],
       [12,  5,  0, ...,  3,  9, 11],
       [11,  4,  0, ...,  2,  6,  8],
       ...,
       [18,  4,  0, ...,  4,  9, 11],
       [22,  8,  3, ...,  7, 12, 15],
       [27, 13,  8, ..., 12, 18, 20]], dtype=uint8)
```

In [67]:
```
import numpy as np

# Assuming Babu1_red is your existing array
```

```
# Make a writable copy of the array
Babu1_red = np.copy(Babu1_red)

# Now you can modify the array
Babu1_red[:, :, 1] = 0
```

In [68]:
```
plt.imshow(Babu1_red)
```

Out[68]:
```
<matplotlib.image.AxesImage at 0x23304f18710>
```



In [69]:
```
Babu1_red[:,:,2]
```

Out[69]:
```
array([[15,  8,  3, ...,  3, 11, 13],
       [14,  7,  2, ...,  3,  9, 11],
       [12,  5,  1, ...,  2,  7,  9],
       ...,
       [18,  4,  0, ...,  3,  6,  8],
       [24, 10,  5, ...,  4, 10, 10],
       [29, 15, 10, ...,  9, 13, 15]], dtype=uint8)
```

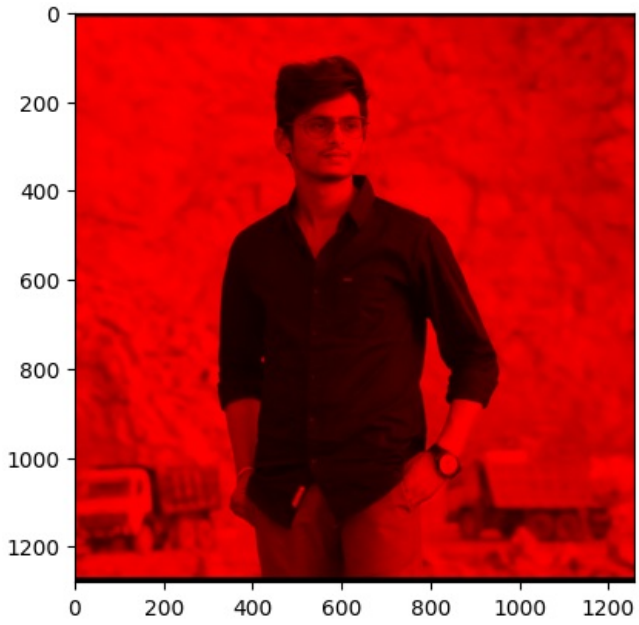
In [70]:
```
Babu1_red[:,:,2]=0
```

In [71]:
```
Babu1_red[:,:,2]
```

Out[71]:
```
array([[0, 0, 0, ..., 0, 0, 0],
       [0, 0, 0, ..., 0, 0, 0],
       [0, 0, 0, ..., 0, 0, 0],
       ...,
       [0, 0, 0, ..., 0, 0, 0],
       [0, 0, 0, ..., 0, 0, 0],
       [0, 0, 0, ..., 0, 0, 0]], dtype=uint8)
```

In [72]:
```
plt.imshow(Babu1_red)
```

Out[72]:
```
<matplotlib.image.AxesImage at 0x23304dc9c70>
```



In [73]:
```
Babu1_arr
```

Out[73]:
```
array([[[19, 13, 15],
        [12,  6,  8],
        [ 7,  1,  3],
        ...,
        [ 3,  3,  3],
        [11, 11, 11],
        [13, 13, 13]],

       [[18, 12, 14],
        [11,  5,  7],
        [ 6,  0,  2],
        ...,
        [ 3,  3,  3],
        [ 9,  9,  9],
        [11, 11, 11]],

       [[15, 11, 12],
        [ 8,  4,  5],
        [ 4,  0,  1],
        ...,
        [ 2,  2,  2],
        [ 8,  6,  7],
        [10,  8,  9]],

       ...,

       [[18, 18, 18],
        [ 4,  4,  4],
        [ 0,  0,  0],
        ...,
        [ 2,  4,  3],
        [ 7,  9,  6],
        [ 9, 11,  8]],

       [[22, 22, 24],
        [ 8,  8, 10],
        [ 3,  3,  5],
        ...,
        [ 5,  7,  4],
        [12, 12, 10],
        [14, 15, 10]],

       [[27, 27, 29],
        [13, 13, 15],
        [ 8,  8, 10],
        ...,
        [10, 12,  9],
        [17, 18, 13],
        [19, 20, 15]]], dtype=uint8)
```

In [74]:
```
Babu1_red
```

Out[74]:
```
array([[[19,  0,  0],
        [12,  0,  0],
        [ 7,  0,  0],
        ...,
        [ 3,  0,  0],
        [11,  0,  0],
        [13,  0,  0]],

       [[18,  0,  0],
        [11,  0,  0],
        [ 6,  0,  0],
        ...,
        [ 3,  0,  0],
        [ 9,  0,  0],
        [11,  0,  0]],

       [[15,  0,  0],
        [ 8,  0,  0],
        [ 4,  0,  0],
        ...,
        [ 2,  0,  0],
        [ 8,  0,  0],
        [10,  0,  0]],

       ...,

       [[18,  0,  0],
        [ 4,  0,  0],
        [ 0,  0,  0],
        ...,
        [ 2,  0,  0],
        [ 7,  0,  0],
        [ 9,  0,  0]],

       [[22,  0,  0],
        [ 8,  0,  0],
        [ 3,  0,  0],
        ...,
        [ 5,  0,  0],
        [12,  0,  0],
        [14,  0,  0]],

       [[27,  0,  0],
        [13,  0,  0],
        [ 8,  0,  0],
        ...,
        [10,  0,  0],
        [17,  0,  0],
        [19,  0,  0]]], dtype=uint8)
```

In [75]:
```
Babu1
```

Out[75]:

In [76]:
```
arr1=np.asarray(Babu1)
```

In [77]:
```
type(arr1)
```

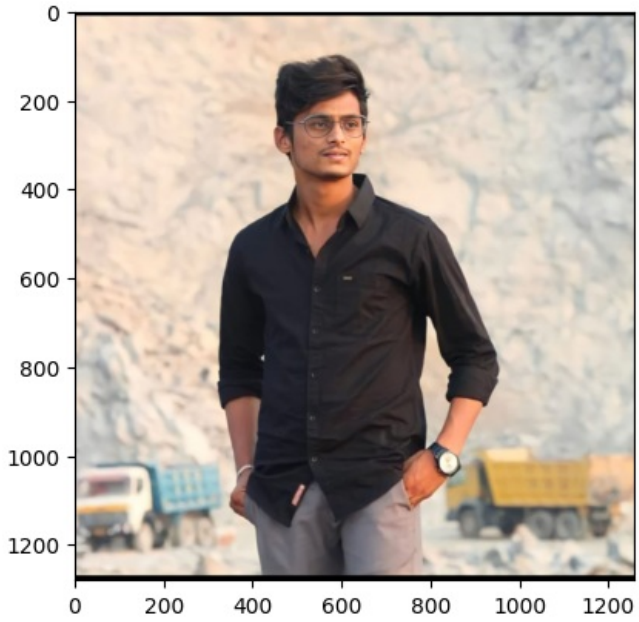
Out[77]:
```
numpy.ndarray
```

In [78]:
```
arr1.shape
```

Out[78]:
```
(1280, 1258, 3)
```

In [79]:
```
plt.imshow(arr1)
```

Out[79]:
```
<matplotlib.image.AxesImage at 0x233053e3a70>
```



In [80]:
```
Babu2=arr1.copy()
```

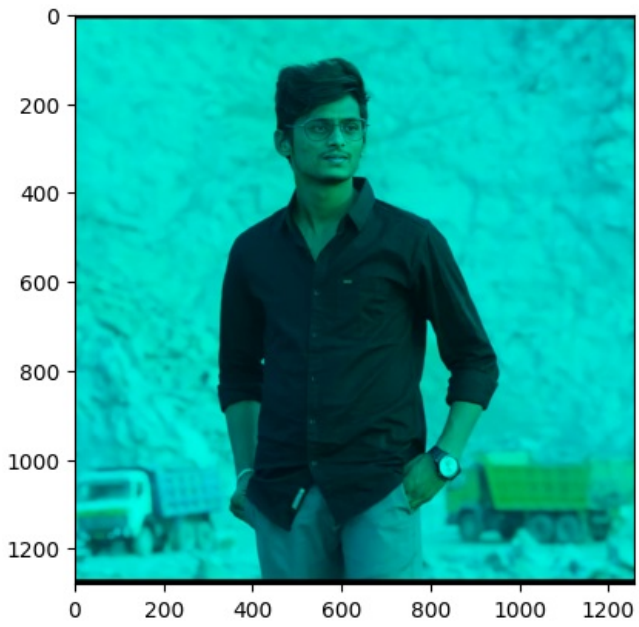
In [81]:
```
Babu2
```

Out[81]:
```
array([[[19, 13, 15],
        [12,  6,  8],
        [ 7,  1,  3],
        ...,
        [ 3,  3,  3],
        [11, 11, 11],
        [13, 13, 13]],

       [[18, 12, 14],
        [11,  5,  7],
        [ 6,  0,  2],
        ...,
        [ 3,  3,  3],
        [ 9,  9,  9],
        [11, 11, 11]],

       [[15, 11, 12],
        [ 8,  4,  5],
        [ 4,  0,  1],
        ...,
        [ 2,  2,  2],
        [ 8,  6,  7],
        [10,  8,  9]],

       ...,

       [[18, 18, 18],
        [ 4,  4,  4],
        [ 0,  0,  0],
        ...,
        [ 2,  4,  3],
        [ 7,  9,  6],
        [ 9, 11,  8]],

       [[22, 22, 24],
        [ 8,  8, 10],
        [ 3,  3,  5],
        ...,
        [ 5,  7,  4],
        [12, 12, 10],
        [14, 15, 10]],

       [[27, 27, 29],
        [13, 13, 15],
        [ 8,  8, 10],
        ...,
        [10, 12,  9],
        [17, 18, 13],
        [19, 20, 15]]], dtype=uint8)
```

In [82]:
```
Babu2[:,:,0]=0
```

In [83]:
```
plt.imshow(Babu2)
```

Out[83]:
```
<matplotlib.image.AxesImage at 0x23304dc94c0>
```



In [84]:
```
Babu2[:,:,1]
```

Out[84]:
```
array([[13,  6,  1, ...,  3, 11, 13],
       [12,  5,  0, ...,  3,  9, 11],
       [11,  4,  0, ...,  2,  6,  8],
       ...,
       [18,  4,  0, ...,  4,  9, 11],
       [22,  8,  3, ...,  7, 12, 15],
       [27, 13,  8, ..., 12, 18, 20]], dtype=uint8)
```

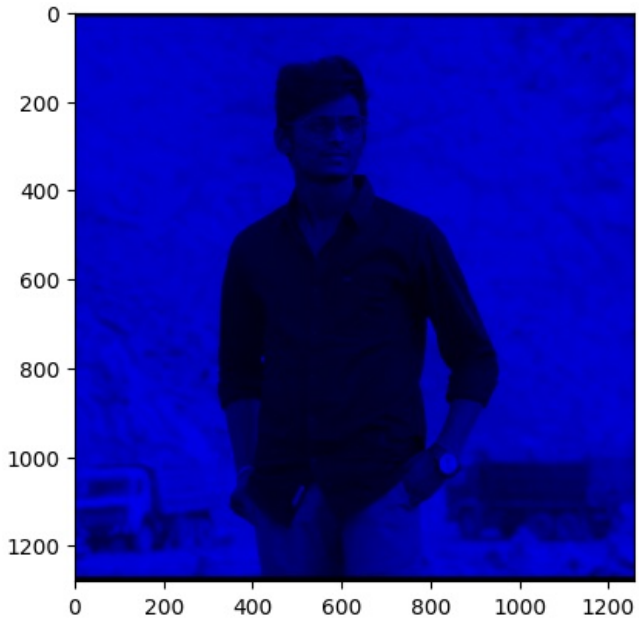
In [86]:
```
Babu2[:,:,1]
```

Out[86]:
```
array([[13,  6,  1, ...,  3, 11, 13],
       [12,  5,  0, ...,  3,  9, 11],
       [11,  4,  0, ...,  2,  6,  8],
       ...,
       [18,  4,  0, ...,  4,  9, 11],
       [22,  8,  3, ...,  7, 12, 15],
       [27, 13,  8, ..., 12, 18, 20]], dtype=uint8)
```

In [87]:
```
Babu2[:,:,1]=0
```

In [88]:
```
plt.imshow(Babu2)
```

Out[88]:
```
<matplotlib.image.AxesImage at 0x23304c5fe90>
```



In [ ]: