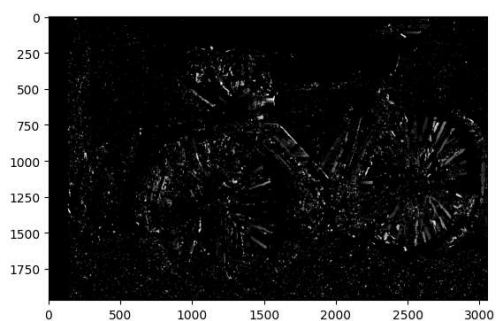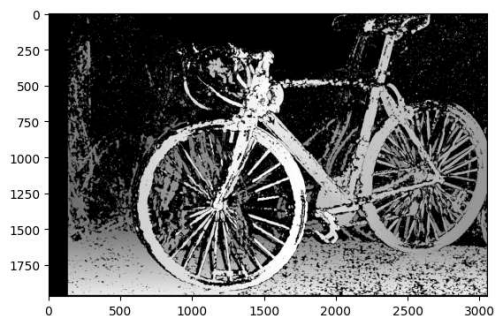```
# import required libraries
import numpy as np
import cv2
from matplotlib import pyplot as plt

# read two input images
imgL = cv2.imread('im0.png',0)
imgR = cv2.imread('im1.png',0)

# Initiate and StereoBM object
stereo = cv2.StereoBM_create(numDisparities=128, blockSize=15)

# compute the disparity map
disparity = stereo.compute(imgL,imgR)
disparity1 = stereo.compute(imgR,imgL)
plt.imshow(disparity,'gray')
plt.show()
plt.imshow(disparity1,'gray')
plt.show()
```
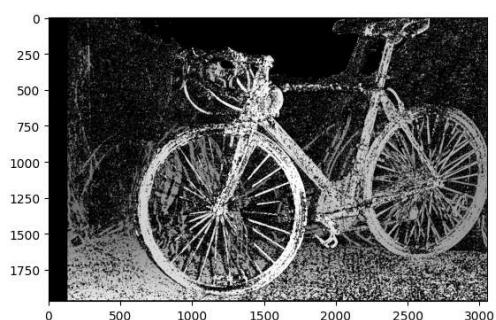




```
# import required libraries
import numpy as np
import cv2
from matplotlib import pyplot as plt

# read two input images
imgL = cv2.imread('im0.png',0)
imgR = cv2.imread('im1.png',0)

# Initiate and StereoBM object
stereo = cv2.StereoBM_create(numDisparities=128, blockSize=9)

# compute the disparity map
disparity = stereo.compute(imgL,imgR)
disparity1 = stereo.compute(imgR,imgL)
plt.imshow(disparity1,'gray')
plt.show()
plt.imshow(disparity,'gray')
plt.show()
```
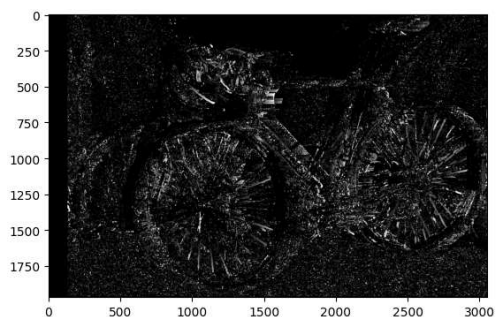
```python
# import required libraries
import numpy as np
import cv2
from matplotlib import pyplot as plt

# read two input images
imgL = cv2.imread('im0.png',0)
imgR = cv2.imread('im1.png',0)

# Initiate and StereoBM object
stereo = cv2.StereoBM_create(numDisparities=144, blockSize=15)

# compute the disparity map
disparity = stereo.compute(imgL,imgR)
disparity1 = stereo.compute(imgR,imgL)
plt.imshow(disparity1,'gray')
plt.show()
plt.imshow(disparity,'gray')
plt.show()
```
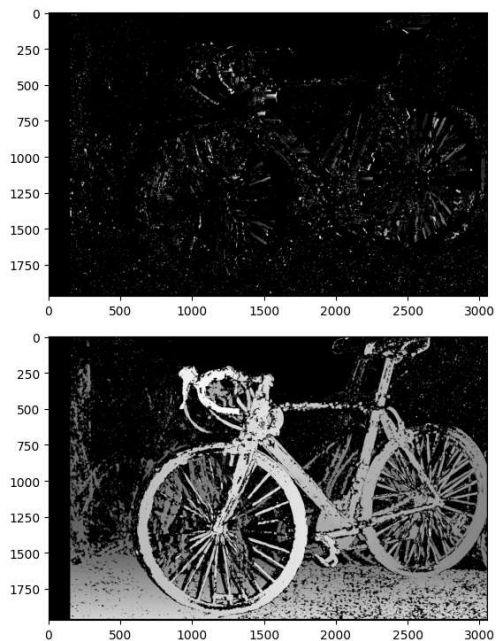


```python
# import required libraries
import numpy as np
import cv2
from matplotlib import pyplot as plt

# read two input images
imgL = cv2.imread('im0.png',0)
imgR = cv2.imread('im1.png',0)

# Initiate and StereoBM object
stereo = cv2.StereoBM_create(numDisparities=144, blockSize=9)

# compute the disparity map
disparity = stereo.compute(imgL,imgR)
disparity1 = stereo.compute(imgR,imgL)
plt.imshow(disparity1,'gray')
plt.show()
plt.imshow(disparity,'gray')
plt.show()
```
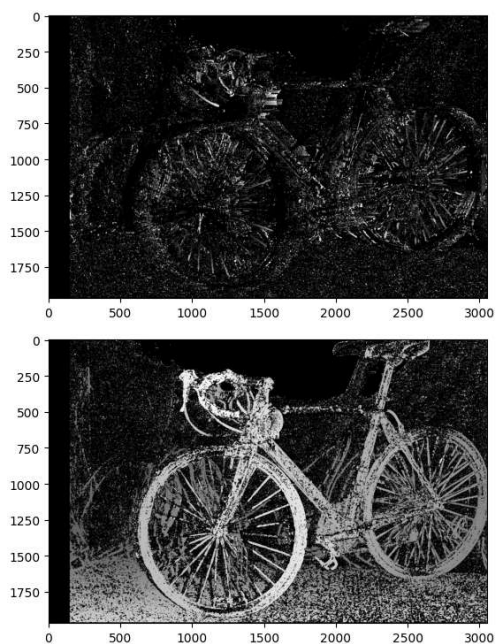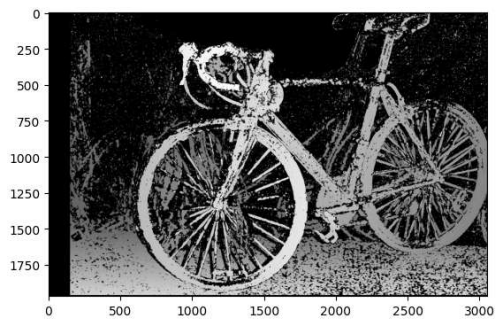


```python
# import required libraries
import numpy as np
import cv2
from matplotlib import pyplot as plt
```

```
# read two input images
imgL = cv2.imread('im0.png',0)
imgR = cv2.imread('im1.png',0)

# Initiate and StereoBM object
stereo = cv2.StereoBM_create(numDisparities=144, blockSize=13)

# compute the disparity map
disparity = stereo.compute(imgL,imgR)
plt.imshow(disparity,'gray')
plt.show()
```



```
focal_length_px = 500
baseline_m = 0.1
depth_map = (focal_length_px * baseline_m)/disparity
plt.imshow(depth_map, cmap='jet')
```

```
<ipython-input-24-b381475517fc>:3: RuntimeWarning: divide by zero encountered in divide
  depth_map = (focal_length_px * baseline_m)/disparity
<matplotlib.image.AxesImage at 0x7d7cbc4f8940>
```