AIM

To process frame of the given video file.

B030 Preet Jha
B1
Lab 9
22 SEP 2022

In [ ]:
```
import cv2
import matplotlib.pyplot as plt
```

In [ ]:
```
capt=cv2.VideoCapture('globe.mp4')
i=0
while (capt.isOpened()):
    r,f=capt.read()
    if r==False:
        break
    cv2.imwrite('abc'+str(i)+'.jpg',f)
    i=i+1
numb_frames = i
numb_frames
```

Out[ ]:
```
901
```

In [ ]:
```
start_f=int((numb_frames)*1/3)
stop_f=int((numb_frames)*2/3)

start_f=int(start_f)
stop_f = int(stop_f)
```

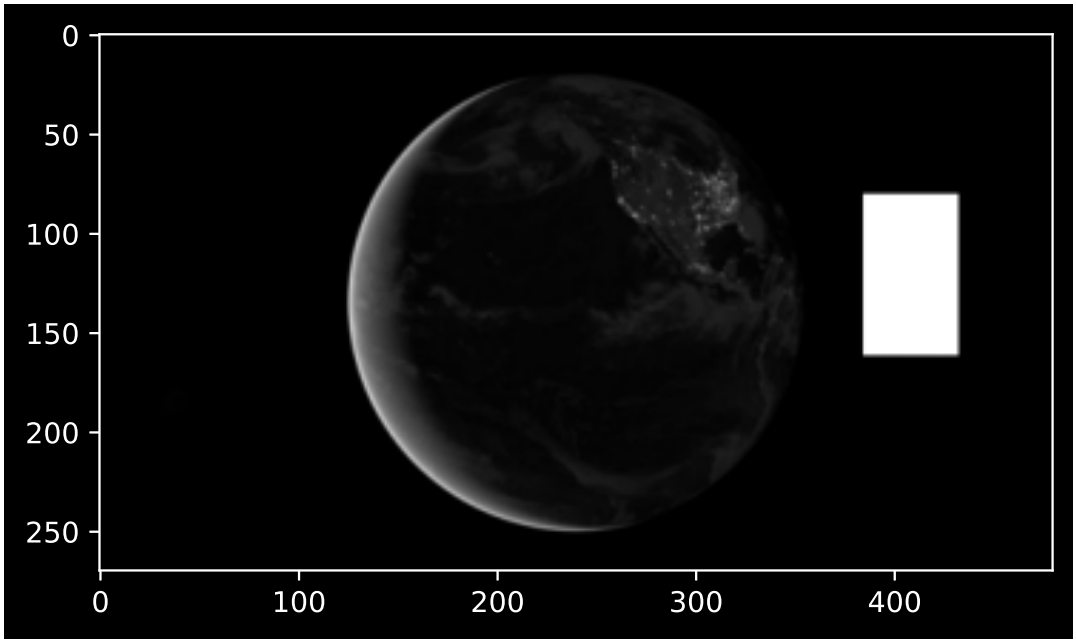
In [ ]:
```
img=cv2.imread('abc0.jpg',0)
sh=img.shape
strt_rw=int(sh[0]*3/10)
stp_rw=int(sh[0]*6/10)
strt_col=int(sh[1]*8/10)
stp_col=int(sh[1]*9/10)

print(strt_rw,strt_rw,strt_col,stp_col)
```

```
81 81 384 432
```

In [ ]:
```
for j in range (start_f,stop_f):
    img=cv2.imread('abc'+str(j)+'.jpg',0)
    #img = cv2.imread('abc0.jpg', 0)
    img[strt_rw:stp_rw,strt_col:stp_col]=255
    cv2.imwrite('abc'+str(j)+'.jpg',img)
capt.release()
cv2.destroyAllWindows()
```

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

Out[ ]:
```
<matplotlib.image.AxesImage at 0x11ae79e40>
```



In [ ]:
```
import glob
```

In [ ]:
```
img_array=[]
for fl_name in glob.glob('abc*.jpg'):
    img=cv2.imread(fl_name,0)
    img_array.append(img)
fourcc=cv2.VideoWriter_fourcc(*'mp4v')
out=cv2.VideoWriter('test1.mp4',fourcc,10,(sh[0],sh[1]),False)

#out1 = cv2.VideoWriter('one.mp4', cv2.VideoWriter_fourcc(*'mp4v'), 10.0,
```

In [ ]:
```
ln=len(img_array)
ln
```

Out[ ]:
```
901
```

In [ ]:
```
for i in range(ln):
    out.write(img_array[i])
out.release()
```

Conclusion

For the given video, some of the frames are extracted and modified and the same set of modified frames is converted to an array of frames which represents the new video with modified frames.