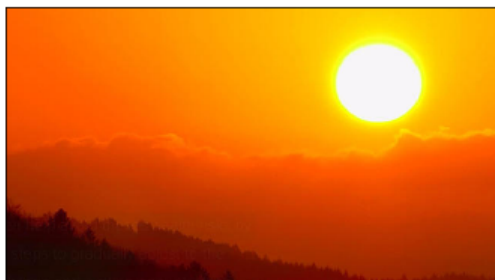
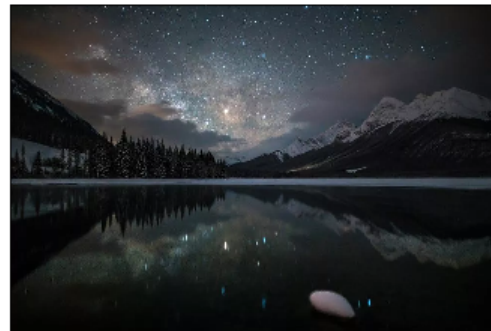


```
In [11]: import cv2
from matplotlib import pyplot as plt

colim=[]
st='daynight'
for i in range(1,8):
    colim.append(cv2.imread(st+str(i)+".jpg",1))

j=1
fig=plt.figure(figsize=(20,20))
for i in colim:
    k=k%2
    #ax=fig.add_subplot(len(colim)*100+j*1+10)
    ax=fig.add_subplot(3,3,j)
    j+=1
    b,g,r=cv2.split(i)
    colim2=cv2.merge([r,g,b])
    ax.imshow(colim2)
    plt.xticks([],plt.yticks([]))
```



```

In [10]: import math
fig=plt.figure(figsize=(20,20))
f=1
for i in colim:
    blc=0
    wc=0
    for j in i:
        for k in j:
            b,g,r=int(k[0]),int(k[1]),int(k[1])
            #print("{} {} {}".format(r,g,b))
            #rat=0.2126*r + 0.7152*g + 0.0722*b
            rat=math.sqrt(0.241*r*r + 0.691*g*g+ 0.068*b*b)
            if(rat > 127):# since Dodger Blue Luminance (127.77) to Gray Scale is 57%
                wc+=1
            else:
                blc+=1
    res=None
    if(wc > blc):
        res="Day/Sunrise"
    else:
        res="Night/Sunset"
    #ax=fig.add_subplot(len(colim)*100+f*1+10)
    ax=fig.add_subplot(3,3,f)
    b,g,r=cv2.split(i)
    colim2=cv2.merge([r,g,b])
    ax.imshow(colim2)
    plt.title(res)
    plt.xticks([],plt.yticks([]))
    f+=1

```

Day/Sunrise



Night/Sunset



Night/Sunset



Day/Sunrise



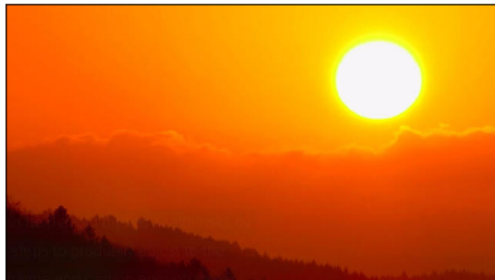
Night/Sunset



Day/Sunrise



Night/Sunset



In []: