

```
In [1]: import cv2
import os
import pathlib
```

```
In [2]: file_dir = '/home/jupyter-doggo/scratch/NOAA/02-05-2023/sample_img/'
```

```
In [3]: # def image_resizer(file_dir, perc_reduction):
```

```
In [4]: def vid_generator(file_dir, start_frame_name, end_frame_name):
    # Get all the possible files in the directory
    filename = os.listdir(file_dir)

    if len(filename) == 0:
        return -3

    # Sorting the filename list is crucial on linux
    filename.sort()

    # Get the start and end frame index
    try:
        start_idx = filename.index(start_frame_name + '.png')
    except:
        # The start file is not found.
        return -2

    try:
        end_idx = filename.index(end_frame_name + '.png')
    except:
        return -1

    # Roll the image list array since the start and end are already found
    images = filename[start_idx:end_idx + 1]

    # Define frame based on the first image, we assume that the size
    # of the image stays the same during the export process
    frame = cv2.imread(os.path.join(file_dir, images[0]))

    # Acquire the dimension and number of layers in the image
    height, width, layers = frame.shape

    # Construct name of the video
    video_name = start_frame_name + '_to_' + end_frame_name + '.avi'

    # Start video writer
    video = cv2.VideoWriter(video_name, 0, 0.25, (width, height))
    # video = cv2.VideoWriter(video_name, 0, 1, (width, height))

    for image in images:
        video.write(cv2.imread(os.path.join(file_dir, image)))

    cv2.destroyAllWindows()
    video.release()
    return 0
```

In [5]: *# Testing purpose*

```
return_code = vid_generator(file_dir, '2012.10.06.1300', '2016.10.05.1800')  
return_code
```

Out[5]: 0

In [6]: *## TO-DO:*

```
start_idx_arr = [] # This needs to come from a csv file
```

```
end_idx_arr = [] # This also needs to come from a csv file
```

```
# Only execute when the numbers of timestamps match perfectly
```

```
print('The timestamps align properly: ', len(start_idx_arr) == len(end_idx_a
```

```
The timestamps align properly: True
```

In []:

In []:

In []: