**1.Introduction**

The process of taking photographs which are ordered in collection of the scene is called a Panorama.

Let us say that you need to capture a big scene, but our camera has a limited field of view and a specific resolution of image, this is certainly not enough to capture the scene. So, with the existing hardware we can capture multiple images of the respective scene and put them together by matching some part of the previous image with the next, forming one image that is the big scene which had to be captured. This is a good idea about having the big scene with some process behind.

The outcome will be one big image of the scenic view.

**9.Apllications**

The possible applications for image stitching for the need of today are meagre. Image stitching is used in modern applications, such as the following:

* [Image Stabilization](https://en.wikipedia.org/wiki/Image_stabilization) feature that use frame-rate image alignment
* High-resolution photo in digital maps and [satellite photos](https://en.wikipedia.org/wiki/Satellite_imagery)
* Medical imaging
* Multiple image super resolution
* Video stitching
* Object insertion
* Video stabilization
* Video matting
* Panorama

The main aspect of our project is to extract the frames from a video and collect the frames in order and put them together for a perfect view of the pattern.

The actual pattern here refers to the “windmills” specifically where a video will be taken through a unmanned aerial vehicle / drone and the video will be converted into a image of much higher resolution. This will help in having the whole pattern at a single instant where there will be no need of seeking through the video to view the part of image for inspection.

Further might be that this can be processed with the help of deep learning to help out inspection for the life of the windmill in this specific application.