

## **Image Slider Using Hand Gesture**

The project is performed using MATLAB in which the transition of multiple images has been shown just by waving a hand in front a webcam. The aim is to control the movement of wallpapers with our hand motion (in MATLAB). Using Digital image processing, the enhancement of the images can be done and perform the required operations on the images.

### **Steps Implemented (Basic Working)**

Different functions of MATLAB have been used in order to execute this program.

- Initiating the webcam to capture the motion of the user and set its RGB value.
- Next, we take out the frames of the motion and calculate the difference of successive frames. We assumed a threshold value to be 40. If the pixels are above the given value, it is set to 255 (i.e. white) else 0 (i.e. black).
- Once the difference is calculated, we check the value of every pixel present in the left and right corner to detect the changes in the motion.
- Depending upon the direction of the hand motion, the next image will be displayed on the screen i.e. if the hand is moved towards left hand side, then next image is displayed and if the hand is moved towards right side, the previous image is shown.