```
In [2]: import numpy as np
        import cv2
        #import pickle
        import import_ipynb
In [3]: frameWidth= 640
                               # CAMERA RESOLUTION
        frameHeight = 480
        brightness = 180
        threshold = 0.25
                                # PROBABLITY THRESHOLD
        font = cv2.FONT_HERSHEY_SIMPLEX
In [4]: # SETUP THE VIDEO CAMERA
        cap = cv2.VideoCapture(0)
        cap.set(4, frameWidth)
        cap.set(5, frameHeight)
        cap.set(15, brightness)
```

Out[4]: True

```
In [7]: def grayscale(img):
            img = cv2.cvtColor(img,cv2.COLOR BGR2GRAY)
            return img
        def equalize(img):
            img =cv2.equalizeHist(img)
            return img
        def preprocessing(img):
            img = grayscale(img)
            img = equalize(img)
            img = img/255
            return img
        def getCalssName(classNo):
            if classNo == 0: return 'Adidas Logo'
            elif classNo == 1: return 'Adobe Logo'
            elif classNo == 2: return 'Airtel Logo'
            elif classNo == 3: return 'Amazon Logo'
            elif classNo == 4: return 'Android Logo'
            elif classNo == 5: return 'Apple Logo'
            elif classNo == 6: return 'Asus Logo'
            elif classNo == 7: return 'BMW Logo'
            elif classNo == 8: return 'Calvin-Klein Logo'
            elif classNo == 9: return 'Dell Logo'
            elif classNo == 10: return 'Facebook Logo'
            else : return 'This might be a phishing website'
        while True:
        # READ IMAGE
            cap = cv2.VideoCapture(0)
            success, imgOrignal = cap.read()
```

```
KeyboardInterrupt
                                                  Traceback (most recent call last)
        <ipython-input-7-77ae52fe4e7f> in <module>
             29 # READ IMAGE
             30
                    cap = cv2.VideoCapture(0)
                    success, imgOrignal = cap.read()
        ---> 31
        KeyboardInterrupt:
In [ ]: # PROCESS IMAGE
        img = np.asarray(imgOrignal)
        img = cv2.resize(img, (32, 32))
        img = preprocessing(img)
        cv2.imshow("Processed Image", img)
        img = img.reshape(1, 32, 32, 1)
        cv2.putText(imgOrignal, "CLASS: ", (20, 35), font, 0.75, (0, 0, 255), 2, cv2.LINE_AA)
        cv2.putText(imgOrignal, "PROBABILITY: ", (20, 75), font, 0.75, (0, 0, 255), 2, cv2.LINE_AA)
        # PREDICT IMAGE
        predictions = model.predict(img)
        classIndex = model.predict classes(img)
        probabilityValue =np.amax(predictions)
        if probabilityValue > threshold:
        #print(getCalssName(classIndex))
            cv2.putText(imgOrignal,str(classIndex)+" "+str(getCalssName(classIndex)), (120, 35), font, 0.75, (0, 0, 3
            cv2.putText(imgOrignal, str(round(probabilityValue*100,2))+"%", (180, 75), font, 0.75, (0, 0, 255), 2,
            cv2.imshow("Result", imgOrignal)
        if cv2.waitKey(1) and 0xFF == ord('q'):
            break
In [ ]:
```