Assignment 6

Develop a python code to detect any object using Haar cascade classifier.

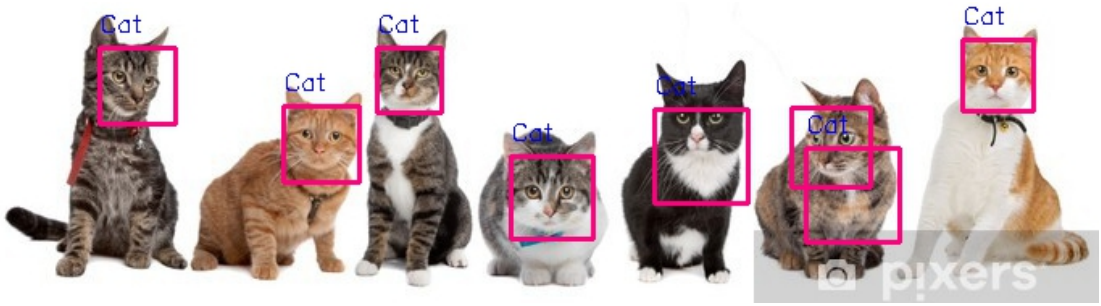
R.S.Vimal
19BEE1045

CODE

```
import cv2

cat_classifier=cv2.CascadeClassifier("haarcascade_frontalcatface_extend
ed.xml")

image=cv2.imread('cat.jpg')

cv2.imshow('Image',image)

cats = cat_classifier.detectMultiScale(image,1.3,5)
print(cats)
for(x,y,w,h) in cats:
    cv2.rectangle(image, (x,y), (x+w,y+h), (127,0,255), 2)
    cv2.imshow('Cat detection', image)
    cv2.putText(image, 'Cat',(x,y-10), cv2.FONT_HERSHEY_SIMPLEX, 0.5,
(255,0,0), 1)

    Key=cv2.waitKey(1)
    if Key==ord('q'):
        video.release()
        cv2.destroyAllWindows()
        Break
```

INPUT IMAGE

OUTPUT IMAGE



OUTPUT

```
import cv2

cat_classifier=cv2.CascadeClassifier("haarcascade_frontalcatface_extended.xml")

image=cv2.imread('cat.jpg')

cv2.imshow('Image',image)

cats = cat_classifier.detectMultiScale(image,1.3,5)
print(cats)
for(x,y,w,h) in cats:
    cv2.rectangle(image, (x,y), (x+w,y+h), (127,0,255), 2)
    cv2.imshow('Cat detection', image)
    cv2.putText(image, 'Cat',(x,y-10), cv2.FONT_HERSHEY_SIMPLEX, 0.5, (255,0,0)

    Key=cv2.waitKey(1)
    if Key==ord('q'):
        video.release()
        cv2.destroyAllWindows()
        break
```

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============= RESTART: C:\Users\rsvim\Desktop\IOT\Assignment-6.py =============
[[188  66  47  47]
 [329  97  51  51]
 [418  68  58  58]
 [512  92  58  58]
 [503  67  49  49]
 [246  30  40  40]
 [609  25  44  44]
 [ 74  30  47  47]]
>>>
```