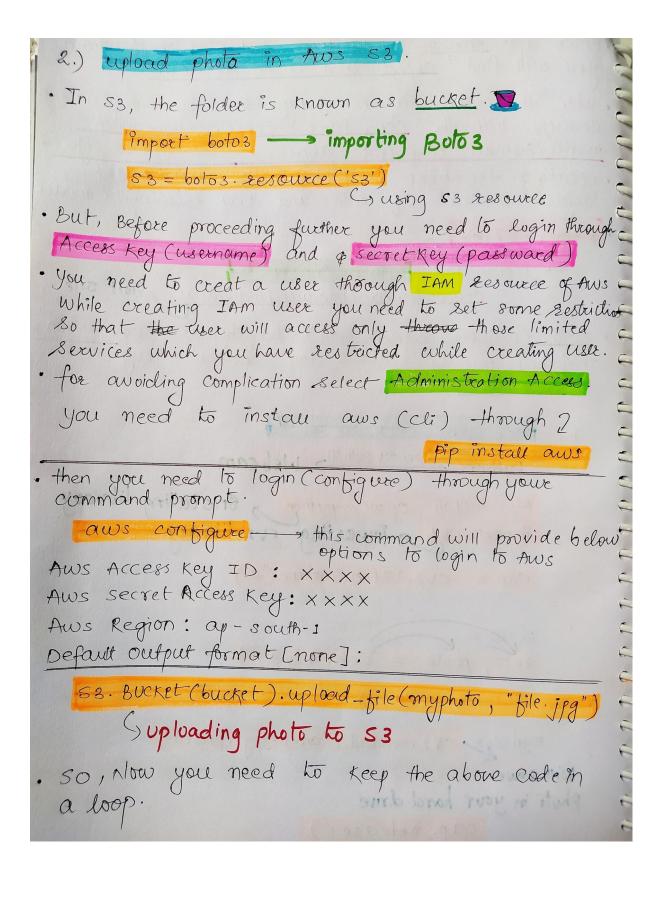
AI ON AWS

- · Our Brain always analyse the things we see acound and also with past experiences.
- eyes of computer web cam [computer vision] Webcam is never intellegent We need to make it intellegent.
- · ears of computer microphone
- · mouth of computer speaker
- · model is created using experience.
- We need to provide lots of datasets to train the model so that will gains experience.
- · To train the model we sequire a particular algorithm, ram, cpu and gpu.
- · Aws provides you AI services eg. pretained model to predict/detect the object.
- · when model predicts the thing is a particular object of car, human then that is known as object detection.
- when model predicts the thing is a specific object eg. Tesla car, Amit boy, a elephant then that is known as object Recognition.
- · for object Recognition we have Amazon Retognition
- · for speech recognition we have Amazon Transcribe
- . for Text to speech we have Amazon poly

enter into Amazon Rekognition and click on try demo you will find object and scene detection. when the model / human analyze the object they always analyze with the confidence 8 coxe. How much model/human confident about that particular object. · Creating the best model Means you should have largest amount of data and keep retraining the model. · Prequisites :--> Download python Anaconda anaconda com/products/individual / Visit site · <u>Boto3</u> (previous version Boto) that library from python that helps you to contact any services through code on Aws cloud. 1.) Web cam click a photo Python open-cv-python Web cam import cuz importing cvz library Cap = cv2. Video Capture (0) ret, photo = Cap. read() if aet's value is True the photo is clicked. myphoto = CN2. imread ("amit. jpg", photo) Will save Photo in your hard drive cap. release()



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3.) Connect Rek service
 Rek service will go inside so and trake that myphoto and detect the person in that image.

Rek service is tightly coupled with so.
 · R if python using Rexognition sewice other than
  33, cloudformation, ecz, etc. then two treats us a
  <del>clied</del> client so, we need to use client function.
   ser = botos. client ('se Kognition', & region)
4.) Responses
a= rek. delect_labels() $
      Image = {
                   Byles': b'bytes,
                    'S30bject': {bucket,
                    Name: prupimage
                                        - Name of bucket
                                   only two labels will shown
          MaxLabels = 2,
           Minconfidence = 90
                                   > only confidence till 90% will be shown.
  print (a)
    a ['Labels'] [3] ['Name']
   m'Beard.
                            > range of 5 inputs.
     for i in range (5):
      print(a ['tabels'][i]['Name'])
```

```
Detecting faces:
b= rek. delect-faces
        Images = {
                    's 3 object': Sbucket s3 object: {
Bucket': bucket
                   'Name': upimage
             Attributes = [ALL]
      b ['faceDe bails'][0]['smile']['value'] == false:
           print (" search and listen songs on spotify")
             Amazon Poly SERVICE
· Amazon's poly service will helps you to do
 text to speech.
 you need to type the text and choose the voice
  type and choose the language and the poly
 service will convert to speech
         import boto3
         po = boto3. client ('polly')
   Res = Po. synthe size_speech (Text = "Hello all",
Output format = mp3
           res['Audios Fream']
   tile = Open ('myadio.mps'), 'w')
   file. write (200 ['Audiostream']. Jead())
   file.close()
    I python. display. Audio ('myaudio. mp3')
```