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MAJOR PROJECT 1

""Major_Project_1.ipynb

Automatically generated by Colaboratory.

Original file is located at

https://colab.research.google.com/drive/1OjgazPxawOhVgDDvs_ppYgn-azaCYU1z

"""

#LOGISTIC REGRESSION (PENGUINS DATASET)

import pandas as pd

df = pd.read_csv("/content/penguins_lter.csv")

df

df.info()

df.shape

Dropping the rows with null values

df = df.drop(3)

df = df.drop(339)

df

df.info()

df.shape

```

#taking i/p

inp = df.iloc[:,9:11].values

inp

#Taking o/p

outp = df.iloc[:,2].values

outp

#train test split

from sklearn.model_selection import train_test_split

inp_train,inp_test,outp_train,outp_test = train_test_split(inp,outp,random_state = 0)

#Applying CLASSIFIER

from sklearn.linear_model import LogisticRegression

model = LogisticRegression()

#model fitting

model.fit(inp_train,outp_train)

#predictor variable

outp_pred = model.predict(inp_test)

outp_pred # predicted outputs

outp_test # actual outputs

#Accuracy

from sklearn.metrics import accuracy_score

accuracy_score(outp_pred,outp_test)*100

model.predict([[37.1, 17]])

```

MAJOR PROJECT 2

import cv2

cam = cv2.VideoCapture(0)

face_cascade = cv2.CascadeClassifier(cv2.data.haarcascades + 'haarcascade_frontalface_default.xml')

while True:

ret, frame = cam.read() ##We are reading the data from the cam variable

if type(frame) == type(None):

break

gray = cv2.cvtColor(frame, cv2.COLOR_BGR2GRAY)

faces = face_cascade.detectMultiScale(gray, 1.1, 1)

for (x, y, w, h) in faces:

cv2.rectangle(frame, (x, y), (x+w, y+h), (255, 0, 0), 4)

cv2.imshow('My web Cam', frame)

if cv2.waitKey(1) == 13: #This saves a picture of the moment when you press enter

cv2.imwrite("CamShot.png", frame)

elif cv2.waitKey(1) == ord('x'): #This ends the process

break

cam.release()

cv2.destroyAllWindows()

