**TUGAS PRAKTIKUM**

**TOPIK DALAM PENGENALAN POLA**

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**MUHAMAD BAHRUL ULUM**

**M0603241012**

**PROGRAM STUDI DOKTORAL ILMU KOMPUTER**

**SEKOLAH SAINS DATA, MATEMATIKA DAN INFORMATIKA**

**INSTITUT PERTANIAN BOGOR**

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﻿**TUJUAN PRAKTIKUM**

﻿Mahasiswa mampu menterjemahkan representasi data dalam Python dan manipulasinya

sehingga bisa menjadi input bagi sistem pengenalan Pola.

#Membaca data dari file dengan format CSV

import pandas as pd

import scipy as sp

import numpy as np

import matplotlib.pyplot as plt

from google.colab import drive

# Mount Google Drive

drive.mount('/content/drive')

# Load dataset

data = pd.read\_csv('/content/drive/MyDrive/PengenalanPola/Data.csv',sep=";")

print(data)

# Membaca data dari file dengan format text (delimeter)

#print("\n read text data with tab delimiter")

with open('/content/drive/MyDrive/PengenalanPola/Data.txt', 'r') as file:

data = file.read()

print(data)

# Membaca data dari URL

f = pd.read\_csv('http://www.exploredata.net/ftp/Spellman.csv')

print(f)

#Membaca file dan menyajikan dalam bentuk grafik

traffic = np.genfromtxt('/content/drive/MyDrive/PengenalanPola/web\_traffic.tsv',delimiter='\t')

print(traffic[:10])

print(traffic.shape)

x = traffic[:,0]

y = traffic[:,1]

x = x[~np.isnan(y)]

y = y[~np.isnan(y)]

plt.scatter(x,y)

plt.title("Web traffic last month")

plt.xlabel("Time")

plt.ylabel("Hits/hour")

plt.xticks([w\*7\*24 for w in range(10)],['week %i' %w for w in range(10)])

plt.autoscale(tight=True)

plt.grid()

A screenshot of a computer

AI-generated content may be incorrect.A table of numbers with numbers

AI-generated content may be incorrect.A black and white text on a white background

AI-generated content may be incorrect.A graph with blue dots

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# Operasi image pada Python

# Instalasi paket open cv

# pilihan load image (contoh logo ipb)

import matplotlib.pyplot as plt

import cv2

import numpy as np

print("read images using opencv")

five = cv2.imread('/content/drive/MyDrive/PengenalanPola/ipb.png')

print(five.shape)

print(five.size)

plt.imshow(five)

cv2.waitKey(0)

# konversi image

import cv2

babon =cv2.imread('/content/drive/MyDrive/PengenalanPola/ipb.png')

babon\_gray =cv2.cvtColor(babon,cv2.COLOR\_BGR2GRAY)

plt.imshow(babon)

plt.imshow(babon\_gray)

# mengambil nilai matriksnya

# acces pixel of images per postion

pixels = five[100,100]

print(pixels)

A blue and yellow logo with white text

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