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|  | **Lembar Kerja Mahasiswa**  **Mata Kuliah Pengolahan Citra Digital Praktik (203311-20)**  **Program Studi Informatika**  **Fakultas Sains & Teknologi – Universitas Teknologi Yogyakarta** | |
|  | **Identitas Mahasiswa** | |
| **Nama** | **Arieska Restu Harpian Dwika** |
| **NPM** | **5200411488** |
| **Kelompok Prak** | **I** |
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| **Soal 1.** | | |
| Berdasarkan demo di kelas, tambahkan fitur pada aplikasi *image browser* sehingga aplikasi dapat menampilkan citra pada layer Red, layer Green, dan layer Blue melalui button seperti pada gambar di bawah! | | |
| **Hasil Script** | | |
| **//tuliskan script python Anda di sini**  from tkinter import \*  from tkinter import filedialog  import os  import tkinter as tk  from PIL import Image, ImageTk  import numpy as np  import cv2 as cv  fln = None  def showImage():      global fln      fln = filedialog.askopenfilename(*initialdir*=os.getcwd(), *title*="Select Image File",  *filetypes*=(                                          ("JPG File", "\*.jpg"),                                          ("PNG File", "\*.png"),                                          ("All Files", "\*.\*"))                                      )      print("Image path : ", fln)      img = Image.open(fln)      imgTk = ImageTk.PhotoImage(img)      lbl.configure(*image*=imgTk)      lbl.image = imgTk  def showRed():      global fln      img = Image.open(fln)      for x in range(img.size[0]):          for y in range(img.size[1]):              r,g,b = img.getpixel((x,y))              img.putpixel((x,y), (r, 0, 0))      imgTk = ImageTk.PhotoImage(img)      lbl.configure(*image*=imgTk)      lbl.image = imgTk  def showGreen():      global fln      img = Image.open(fln)      for x in range(img.size[0]):          for y in range(img.size[1]):              r,g,b = img.getpixel((x,y))              img.putpixel((x,y), (0, g, 0))      imgTk = ImageTk.PhotoImage(img)      lbl.configure(*image*=imgTk)      lbl.image = imgTk  def showBlue():      global fln      img = Image.open(fln)      for x in range(img.size[0]):          for y in range(img.size[1]):              r,g,b = img.getpixel((x,y))              img.putpixel((x,y), (0, 0, b))      imgTk = ImageTk.PhotoImage(img)      lbl.configure(*image*=imgTk)      lbl.image = imgTk  if \_\_name\_\_ == '\_\_main\_\_':      root = Tk()      frm = Frame(root)      frm.pack(*side*=BOTTOM, *padx*=15, *pady*=15)      lbl = Label(root)      lbl.pack()      btn = Button(frm, *text*="Browser Image", *command*=showImage)      btn.pack(*side*=tk.LEFT)      btn2 = Button(frm, *text*="Red", *command*=showRed)      btn2.pack(*side*=tk.LEFT, *padx*=10)      btn2 = Button(frm, *text*="Green", *command*=showGreen)      btn2.pack(*side*=tk.LEFT, *padx*=10)      btn2 = Button(frm, *text*="Blue", *command*=showBlue)      btn2.pack(*side*=tk.LEFT, *padx*=10)      btn2 = Button(frm, *text*="Exit", *command*=lambda: exit())      btn2.pack(*side*=tk.LEFT, *padx*=10)      root.title("Image Browser App")      root.geometry("1280x720")      root.mainloop() | | |
| **Hasil Running – setelah button Red di-klik** | | |
| **//paste-kan tampilan aplikasi Anda di sini** | | |
| **Hasil Running – setelah button Green di-klik** | | |
| **//paste-kan tampilan aplikasi Anda di sini** | | |
| **Hasil Running – setelah button Blue di-klik** | | |
| **//paste-kan tampilan aplikasi Anda di sini** | | |