**TUGAS**

**PENGOLAHAN CITRA DIGITAL**

**Pertemuan 5 – Bitmap VS VektorFile**

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| Kelas: 5 CA | Mata Kuliah: Pengolahan Citra Digital |

**Alat dan Bahan:**

1. Text Editor
2. Python
3. Library Python numpy, opencv
4. Google Colab (Opsional)
5. **Menggambar Pemandangan Menggunakan Python**

Source Code:

**import numpy as np**

**import cv2 as cv**

***# Menentukan canvas***

**img = np.ones((512, 512, 3), np.uint8)\*255**

**cv.circle(img, (200, 200), 20, (255, 0, 0), -1)**

**for angle in range(0, 360, 45):**

**x\_offset = int(60 \* np.cos(np.radians(angle)))**

**y\_offset = int(60 \* np.sin(np.radians(angle)))**

**cv.circle(img, (200 + x\_offset, 200 + y\_offset), 30, (147, 20, 255), -1)**

**cv.rectangle(img, (190, 220), (210, 320), (0, 255, 0), -1)**

**daun\_pts = np.array([[170, 250], [190, 240], [190, 260]], np.int32)**

**cv.polylines(img, [daun\_pts], True, (0, 128, 0), 3)**

**daun\_pts = np.array([[210, 250], [230, 240], [230, 260]], np.int32)**

**cv.polylines(img, [daun\_pts], True, (0, 128, 0), 3)**

**for x in range(0, 400, 40):**

**triangle\_pts = np.array([[x, 340], [x + 15, 320], [x + 30, 340]], np.int32)**

**cv.fillPoly(img, [triangle\_pts], (0, 128, 0))**

**font = cv.FONT\_HERSHEY\_SIMPLEX**

**cv.putText(img, "Muhammad Rifqi Amir Putra", (10, 500), font, .5, (0, 0, 0), 1, cv.LINE\_AA)**

**cv.imshow("My Drawing", img)**

**cv.waitKey(0)**

**cv.destroyAllWindows()**

Hasil:

A screenshot of a computer

Description automatically generated