Egyptian Banknote Counter

# Description

## Main Idea

This project aims at **identifying** and **counting** currencies given in EGP, you have a dataset contains sample images of EGPs all are in JPEG format. Your system shall identify the following currency categories {0.5, 1, 5, 10, 20, 50, 100, 200}.

|  |  |
| --- | --- |
| **Input** | **Output** |
| C:\Users\Nora\AppData\Local\Microsoft\Windows\INetCache\Content.Word\EGP_10_Pounds_2003_(Front).png  C:\Users\Nora\AppData\Local\Microsoft\Windows\INetCache\Content.Word\794896079.jpg | 1 10 EGP  1 100 EGP  110 EGP |

## Minimum Requirements

1. Detect and identify banknote category (one banknote per image).
2. Detect and identify banknote categories (all in one).
   1. Banknotes are **non-intersecting**.
3. Detect banknote in slightly rotated input images.

# Suggested Search Tracks and Keywords

You may use some/all of the following keywords as a guide (not restricted to them):

1. Segmentation (Edge/Color)
2. Morphological operations
3. Region properties
4. Representation and description
5. Matching and classification

**Test Images for Minimum Requirements**

Case1: Upright front/back images containing a single banknote.

Case2: Upright front/back images containing a set of non-intersecting banknotes.

Case3: Slightly rotated images with non-intersecting banknotes.