Problem Statement

Given an image of a vehicle (Indian), you need to identify the dimensions of each character (A-Z, 0-9) from the license plate.

Sample Input:



Example Output:

TN02BK6751

Plate Dimensions - 500 x 120 mm

Character-wise analysis:

| | | Height | Width | Thickness | Space | |
|---|---|--------|-------|-----------|-------|--|
| Т | - | 65 | 33 | 9 | 10 | |
| Ν | - | 65 | 34 | 11 | 20 | |
| 0 | - | 66 | 34 | 10 | 9 | |
| 2 | - | 65 | 34 | 10 | 18 | |
| В | - | 65 | 34 | 10 | 10 | |
| | | | | | | |

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These are just sample outputs. You need not get the exact same values. But try to extract these features. Bonus points to anyone who can identify more useful features and justify it.

Refer to the input image folder. Try to make your solution work on any given input. https://github.com/rahulrk2303/Assignment-for-2nd-and-3rd-year-IT-students

You can make use of the internet. I would like students to think of different ways to approach this problem and the most efficient and innovative solution will make you stand out.

I won't encourage you to copy code directly from some website or Github. Try to analyze, understand, and improve it. Provide details of the websites you referred to.

Also, I suggest a healthy competition between students. Share ideas. Do not share your code. Work individually. We will be judging you based on your code, not someone else's.

Hint - License plate detection, Character Segmentation, OCR, Bounding boxes, Dimension Analysis.

Github - Upload your code, output screenshots, and a readme file explaining exactly what you have done and why you think this is more efficient/innovative. Documentation is very important for others to understand your code. Also, provide installation instructions (Environment setup, packages used). You can also use Google Colab.

This is not part of your academics and you won't be given marks for this.

"You only fail when you stop trying"

You have 5 days to complete this assignment. Deadline - 17/10/2020 (Saturday)