

Digital Camera Autodetect: Day or Night

Problem Statement

You need to construct a feature in a Digital Camera, which will auto-detect and suggest to the photographer whether the picture should be clicked in day or night mode, depending on whether the picture is being clicked in the daytime or at night. You only need to implement this feature for cases which are directly distinguishable to the eyes (and not fuzzy scenarios such as dawn, dusk, sunrise, sunset, overcast skies which might require more complex aperture adjustments on the camera).



img01day.jpg
12.3 kB
Thu 16 Jan 2014 04:26:35 PM IST



img02day.jpg
10.0 kB
Thu 16 Jan 2014 04:27:08 PM IST



img03day.jpg
10.7 kB
Thu 16 Jan 2014 04:27:56 PM IST



img04day.jpg
11.2 kB
Thu 16 Jan 2014 04:28:06 PM IST



img05day.jpg
9.7 kB
Thu 16 Jan 2014 04:28:18 PM IST



img06day.jpg
14.6 kB
Thu 16 Jan 2014 04:29:44 PM IST



img07day.jpg
16.6 kB

Thu 16 Jan 2014 04:29:54 PM IST



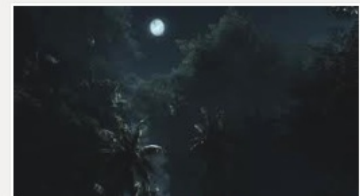
img08day.jpg
5.3 kB

Thu 16 Jan 2014 04:30:14 PM IST



img09night.jpg
8.5 kB

Thu 16 Jan 2014 04:30:35 PM IST



img10night.jpg
2.5 kB

Thu 16 Jan 2014 04:31:27 PM IST



img11night.jpg
12.8 kB

Thu 16 Jan 2014 04:32:09 PM IST



img12night.jpg
6.5 kB

Thu 16 Jan 2014 04:32:23 PM IST

Input Format

A 2D Grid of pixel values will be provided (in regular text format through STDIN), which represent the pixel wise values from the images (which were originally in JPG or PNG formats).

Each pixel will be represented by three comma separated values in the range 0 to 255 representing the **Blue, Green and Red** components respectively. There will be a space between successive pixels in the same row.

Input Constraints

None of the original JPG or PNG images exceeded 20kB in size. The 2D grids of pixels representing these images will not exceed 1MB.

Sample Input

This is for the purpose of explanation only. The real inputs will be much larger than this.

```
0,0,200 0,0,10 10,0,0
90,90,50 90,90,10 255,255,255
100,100,88 80,80,80 15,75,255
```

The above is an image represented by 3x3 pixels. For each pixel the Blue, Green and Red values are provided, separated by commas. The top left pixel has (Blue=0,Green=0,Red=200). The top-right pixel has (Blue=10,Green=0,Red=0). The bottom-right pixel has (Blue=15,Green=75,Red=255). The bottom-left pixel has (Blue=100,Green=100, Red=88).

Output Format

Just one word: 'day' or 'night'. Do NOT include the single quote marks.

Sample Output (Please note that the sample input shown above does not actually represent a full fledged image!)

```
day
```

A Note on the Test Cases and Sample Tests

The test cases have been generated from the 16 images out of which 12 have been shown in the pictures at the top. The two test cases which run as sample test cases when you compile and test, are the pictures marked as img01day.jpg and img09night.jpg respectively.

Libraries

Libraries available in our Machine Learning/Real Data challenges will be enabled for this contest and are listed [here](#). Please note, that occasionally, a few functions or modules might not work in the constraints of our infrastructure. For instance, some modules try to run multiple threads (and fail). So please try importing the library and functions and cross checking if they work in our online editor in case you plan to develop a solution locally, and then upload to our site.