

# Problem: BEA

## Beads

*Qualifications, 11.10.2014*

Johnny Citrus messed up. His sister was making a beautiful necklace from colorful beads, when he accidentally knocked a jar with beads, and the beads scattered all over the floor. The sister is very angry at her brother and she not only told him to clean up the beads, but also to count them, to make sure that not a single one is missing. Of course Johnny does not want to do it by hand, and he thought that the easiest way will be writing a computer program which will do it for him. And since Johnny is still very young, it is up to you to write such a program.

### Input

In the first line of the input file there is a name of a file with a photo or film documentation of the floor on which beads lie.

### Output

The output file should consist of one line with seven integers  $b_1, b_2, \dots, b_7$ , which should specify the number of beads respectively colored blue, green, red, black, orange, cyan and yellow. Since Johnny's sister does not trust in her brother's ability to name colors, she has put in file `colors.jpg` one bead of each color (the order of colors is counter-clockwise, starting from the topmost bead).

### Scoring

If  $B_1, B_2, \dots, B_7$  are actual numbers of beads on the floor, then by total error we mean a number

$$e = \max(|B_1 - b_1|, |B_2 - b_2|, \dots, |B_7 - b_7|).$$

The score for a test is  $\min(e + 1, 1000)$ . This is a minimization problem, therefore the smaller the total error, the better. The percentage of guaranteed points is 0%. In this problem scores received by teams for tests will be hidden.

### Example

For the input data:

`bea00.in.jpg`

the correct result is:

21 0 0 0 16 0 0