

Average

Given the califications of 1st, 2nd and 3rd trimester calculate the average. Moreover, if the average is at least 6 indicate that the year is aproved with the leyend "APROBADO". On the contrary write "DESAPROBADO".

The califications will be integer numbers between 1 and 10 inclusive, and it's sum divisible by 3.

Input

One line with 3 integer numbers corresponding to the 1st, 2nd and 3rd trimester respectively.

Output

One line with the final average.

Then another line indicating "APROBADO" or "DESAPROBADO" as appropriate.

Example

Input:

4 4 10

Output:

6

APROBADO