

HOMEWORK 5

Submission deadline: Sunday 20th of October, 20:00.

Any question, write to giovanni.casini@uni.lu

QUESTION 1

Write a program that solve the following problem:

Let's throw 10 dices with 1,2,3,4,5,6.

After the 10 throws:

- You win 2 if the sum of the values on the dice is from 10 to 23.
- You loose 160 if the sum of the values on the dice is either 24 or 48.
- You win 250 if the sum of the values on the dice is 42.
- You loose 5 in any other case.

Give an estimation of your average winnings/losses considering 1000 tests.

QUESTION 2

Create two 2x3 NumPy arrays of integer numbers, sum them, and modify the resulting array by substituting each element with the product of itself with the number of its row.

For example, in the array

$$\begin{bmatrix} 1 & 2 \\ 1 & 3 \end{bmatrix}$$

the number 2 should be substituted with $2 \times 1 = 2$, since it is in the first row, while the number 3 should be substituted with $3 \times 2 = 6$, since it is in the second row.