Project 1 - Ex. 11

Summer Semester 2022/23

1. Write a Matlab m-file, which will calculate values of the following finite sum of numbers

$$\sum_{i=1}^{n} \frac{1}{i(i+1)(i+2)} = \frac{1}{1 \cdot 2 \cdot 3} + \frac{1}{2 \cdot 3 \cdot 4} + \ldots + \frac{1}{n(n+1)(n+2)}$$

   in two versions:

   a) fully sequential,

   b) distributed (using the parfor loop).

2. Run both programs for different values of n, e.g., $n = 1000000$, $n = 100000000$, $n = 1000000000$ $n = 10000000000$.

3. Compare results of calculations and execution times for all versions.

4. Write the report on your work and results.

5. Save the report and your Matlab files on server Studia, in module Reports, in report under the n **Project 1**