



PARTNERSHIP FOR ADVANCED COMPUTING IN EUROPE

OpenMP – More OpenMP

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OpenMP – Exercise 4

- ▶ Goal: To exercise the concepts explained in this lecture
- ▶ SAXPY stands for “Single-Precision A·X Plus Y”:
 - ▶ Equation: $ax + y$
- ▶ Instructions
 - ▶ Compile `saxpy.c` file without OpenMP and run it.
 - ▶ Parallelize the for loop in `saxpy` function
 - ▶ Add timer to the function call. In C language, timer can be added by using function `gettimeofday`. Refer to file `e2.c` and try to figure it out.
 - ▶ Compile the `saxpy.c` file. If there are any errors, try to solve them on your own.
 - ▶ Set number of threads to 1 and run the code. What is the time of execution for `saxpy` function?
 - ▶ Set the number of threads to 2 and run the code. What is the difference in time of execution?
 - ▶ Set the number of threads to 12 and run the code. How does the time of execution change with increasing number of threads?



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THANK YOU FOR YOUR ATTENTION

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