MKL-lab2 : FFT with pragma offload and Native Execution

In this example we learn how to offload MKL function calls using offload pragmas.

**1. Objectives and learning goals**

- To control memory allocation on MIC
- Understand data transferring and data persistence
- Set up the build environment
- Compile the program on the host without modifying the original code
- `icc --no-offload -mkl mkl_fft.c -o mkl_fft`
- Run the program: `./mkl_fft`
- Code to offload, replace the LRZ WORK FOR YOU comments with MKL calls
- Compile the program for offload: `icc -mkl mkl_fft.c -o mkl_fft`
- Run the program: `./mkl_fft`
- Check the performance results

- What about the performance:
- Compile the program for Native execution:
- `icc --mMIC -mkl_fft.c -o mkl_fft.mic`
- add this setting:
  ```
  export KMP_AFFINITY=explicit,granularity=fine,proclist=[1-240:1]
  ```
- and run again.

Try now to understand the performance numbers.