Advaned Programming fo HPC - Report 1

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October 31, 2021

How do I implement the conversion ?

- Added the calculation code from labwork1$_{C}PU()tolabwork1_{O}penMP()Addedthelinepragmaompparallelfor$

```
void Labwork::labwork1_OpenMP() {
    printf("Open MP");
    int pixelCount = inputImage->width * inputImage->height;
    outputImage = static_cast<char *>(malloc(pixelCount * 3));
    // do something here
    # pragma omp parallel for
    for (int j = 0; j < 100; j++) {     // let's do it 100 times, otherwise it's too fast!
        for (int i = 0; i < pixelCount; i++) {
            outputImage[i * 3] = (char) (((int) inputImage->buffer[i * 3] + (int) inputIma
            outputImage[i * 3 + 1] = outputImage[i * 3];
            outputImage[i * 3 + 2] = outputImage[i * 3];
        }
    }
}
```

What is the speed up ?
- labwork 1 CPU ellapsed 261 ms
- labwork 1 ellapsed 43.4 ms (OpenMP modifired)

It looks like 7 times faste !