

CENG204 - Computer Organization

Homework 3

Deadline: 08/05/2024 23:59 (Late Submissions are not allowed)

In this homework, you will defined optimized version of compute1 method as compute2 method (homework3.c). Delete the comment in the compute2 method and develop your own code which will produce the same results as compute1 but in a much **efficient** way.

```
- double compute2(unsigned char data[H][W]) {  
-     // student code  
- }
```

Use Online C Compiler where language set as C. Beware, due to many reasons in each run speedup-factor can be different. So, test your code 10 times and consider your speedup as the maximum one.

- You will do this homework alone.
- 80% percent of the grade will be based on speedup-factor you obtained and 20% of your grade will be based on the quality of the code (indentation, readability, variable names etc.).
- During the grading, your code will be executed 10 times.
- So in any execution if result of the method2 differs from result of the given method1 then you will get zero from the 80% part.
- Solution must be in a single C file `homework3.c` file but don't forget to write your name, surname and student number as a comment to the beginning of your file .
- Submit only `homework3.c` file.

Penalty for cheating:

- If cheating is detected **once**, students will **loose half of their all homeworks grades** (Hw1, Hw2, Hw3, Hw4 and Hw5).
- If cheating is detected **twice**, students **will loose the grades of all homeworks**.
- If cheating is detected more than two times, students will get FF and failed from the course.
- Detection of cheating **will not be announced** until at the end of the semester.

What is **cheating**?

- Sharing code: by copying, retyping, looking at, or supplying a file
- Describing: verbal description of code from one person to another.
- Coaching: helping your friend to write a homework, line by line
- Searching the Web for solutions
- Copying code from a previous course or online solution
- You are only allowed to use code we supply

What is **NOT cheating**?

- Explaining how to use systems or tools
- Helping others with high-level design issues

You can ask your questions via yusufsevkigunaydin@aybu.edu.tr with the mail subject "**About CENG204 Hw3**".