

PROGRAMMING ASSIGNMENT 4**Due date:** 22.05.2022 23:00

Write a new system call function in your kernel.

Your system function **get_memory_usage(int pid)** should take a PID of a process as an argument, then return the memory usage in the system. You can use top command with necessary parameters to get the information needed to implement this function.

You can use the steps that are shared with you during your lab to add a system function to your kernel (where to put your new function, how to compile your kernel code, how to call your new system function, etc.).

After you implement your new system function named `get_memory_usage` and compile your new kernel, you should test it with the given code (`mem_test.c`).

Notes:

- Be prepared to demonstrate your kernel with the new system call.
- You need to work individually, no group work is allowed.
- No late homework will be accepted.

Submission: You are required to submit your **commented** source code to cloud-lms. Please create a compressed file including your **get_memory_usage** function implementation and **screenshots** of the test you did; and name it as `yourstudentnumber_P4.zip` (e.g. If your student number is 201812345678, the file name must be `201812345678_P4.zip`).