CS3500 LAB 3 REPORT - CS19B012

Problem 1:

Printing page table entries is accomplished by defining a function vmprint(), having it's prototype in defs.h & the definition in vm.c. The argument of this function is the pagetable. The function is invoked in exec.c file, if the process id is 1.

The implementation of the function is as follows:

We take the help of a helper function print_pt_contents() that takes the pagetable & the depth as arguments and recursively prints using the dfs algorithm.

Problem 2:

Skipping the page allocation is accomplished by removing the growproc() part, which actually does the memory allocation part & just changing the size field within the sbrk() function

Problem 3:

To avoid errors, checked whether r_sauce() returns 13 or 15, in which case (page load / store fault) in usetrap() function (trap.c file), trap handler allocates new physical memory and adds to page table, so the error is avoided

PS:

I was feeling sick for the past 2 days, so was resting and was unable to make recordings & report in time, so started making them as soon as I woke up in the morning.