README FOR KERNEL (QUESTION 2)

1. The first step was to make a C file containing the hand-wired matrix, which calls the syscall function afterward declaration and prints the swapped matrices respectively.
2. I copied the contents of matrix 2 to matrix 1 by creating a syscall file.
3. The syscall file was created by going into arch->x86->entry->syscalls->nano syscall_64.
4. At the 451 ist position, I added my kernel_2D_memcpy.
5. Then afterward, I went into sys.c file and added my syscall function, which contained its declaration and copy_to and copy_from functions to swap.
6. Then I implemented the command make to make the required changes.
7. After that, I made a copy of my new kernel, and from that copy, I implemented some commands to make the patch files.
8. At last, I built my C program using the GCC, and it worked perfectly.

ORIGINAL MATRIX

```
float matrix1[4][4]={{3.0,4.0,5.0,6.0},{1.0,2.0,3.0,4.0},{6.0,7.0,8.0,9.0},{9.0,8.0,7.0,6.0}};

float matrix2[4][4]={{69.0,69.0,69.0,69.0},{96.0,96.0,96.0,96.0},{69.0,69.0,69.0,69.0},{96.0,96.0,96.0,96.0}};
```

SWAPPED MATRIX (MATRIX 2 SWAPPED INTO 1)

```
69.000000 69.000000 69.000000 69.000000
96.000000 96.000000 96.000000 96.000000
69.000000 69.000000 69.000000 69.000000
96.000000 96.000000 96.000000 96.000000

69.000000 69.000000 69.000000 69.000000
96.000000 96.000000 96.000000 96.000000
69.000000 69.000000 69.000000 69.000000
96.000000 96.000000 96.000000 96.000000
```