## Assignment 1

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**Answer 1:** The memory address of the variable jiffies in my custom build kernel is 0xc06a0d20.

We can find the address of the variable of function by directly printing them using %p format or by using nm or objdump on the module.ko file.

The address is the virtual memory address.

When the kernel is build the compiler permanently gives these addresses and to see them we can view them in System.map file generated for the kernel we build.

jiffies is the lower 32 bit of the jiffies\_64 variable.

**Answer 2:** When we configure the kernel ,we select the OMAP machine . So it sets the config variable for CONFIG\_DM\_TIMER to true thus stating the makefile to compile the dmtime.c file. The compiler compiles the dmtimer.c and generate dmtimer.o file. Then in kernel build process since the CONFIG\_ARCH\_OMAP\_PLUS was set to true. The compiler then links all the object file together to generate built-in.o in arch/arm/plat-omap folder. Then all such build-in.o files are linked together in vmlinux file.

Answer 3: