

Kernel Module

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Code Description

My code has two functions named `My_Module_init()` and `My_Module_exit()`. First function contains a struct `task_struct` and `task_list` is the pointer to the `task_struct` of the process. `for_each_process()` is a macro which is used to iterate over a the list it takes the pointer of the list as a parameter. Then it has an if condition which checks if the `mystring`(it is the name of the process taken as command line input using `module_param()` macro) is the same as the name of the process in the struct. I am comparing two strings using `strcmp()` function. If it is equal then I am printing the pid, `user_id` , `pgid` and path of the process given as command line input. `My_Module_exit()` function contains a print statement which prints when the module is unloaded. At last I am using the `module_init()` macro which is used to call the function at the time of loading and then a `module_exit()` macro which is used to call the function at the time of unloading the module.