

Assignment 8

Problem A:

Write a Linux Kernel Module in C which will accept a string as a command line argument and that command line argument string should get appended to /var/log/messages, after inserting the module into the kernel as well as removing the module from the kernel.

Hints:

- * Learn about loadable kernel module.
- * Go through the command lsmod, insmod, rmmod, modinfo, etc.

Problem B:

Implement malloc() in C programming language.
For example, look at the following code for dynamic memory allocation-

```
#define N 10
int main()
{
    int i, *array;
    printf( "\nEnter N numbers: ");
    array = MyOwnMalloc( sizeof( int ) * N );
    for( i=0; i<N; i++)
        scanf( "%d", &array[i]);
    printf( "\n The numbers are: \n");
    for(i=0; i<N; i++)
        printf( " %d", array[i]);
    return 0;
}
```

So, your job is to implement the **MyOwnMalloc()** function. The above code segment is showing only for integer type, but your job is to implement it for any type allocation.

Again, try to implement free() also.
