```
#include linux/module.h>
#include ux/fs.h>
#include linux/proc fs.h>
#include linux/uaccess.h>
#define DEVICE_NAME "sys_metrics"
#define BUF_LEN 1024
static int device_open(struct inode *, struct file *);
static int device release(struct inode *, struct file *);
static ssize_t device_read(struct file *, char *, size_t, loff_t *);
static int major;
static char msg[BUF_LEN];
static int msg len;
static struct file_operations fops = {
  .read = device read,
  .open = device_open,
  .release = device_release
};
static int __init sys_metrics_init(void) {
  major = register_chrdev(0, DEVICE_NAME, &fops);
  if (major < 0) {
     printk(KERN_ALERT "Registering char device failed with %d\n", major);
     return major;
  printk(KERN_INFO "Device registered with major number %d\n", major);
  return 0;
}
static void exit sys metrics exit(void) {
  unregister_chrdev(major, DEVICE_NAME);
}
static int device_open(struct inode *inode, struct file *file) {
  sprintf(msg, "CPU Usage: %%\nMemory Usage: %%\n"); // Example placeholders
  msg len = strlen(msg);
  return 0;
}
static ssize_t device_read(struct file *filp, char *buffer, size_t length, loff_t * offset) {
  int bytes read = 0;
  if (*offset >= msg_len) return 0;
  while (length && *offset < msg_len) {
     put user(msg[*offset], buffer++);
```

```
length--;
    (*offset)++;
    bytes_read++;
}
return bytes_read;
}
static int device_release(struct inode *inode, struct file *file) {
    return 0;
}
module_init(sys_metrics_init);
module_exit(sys_metrics_exit);

MODULE_LICENSE("GPL");
MODULE_AUTHOR("Your Name");
MODULE_DESCRIPTION("A simple device driver to print system metrics");
```