

Day - 1

- **Session 1: Debugging by printing & querying**
 - Printk & dmesg
 - Proc and sysfs
 - IOCTL
- **Exercises**
 - Examples involving printk() w/ dmesg
 - Querying various procfs and sysfs
- **Session 2: Crash Dump analysis**
 - Oops & Panics
 - Analysis of Pops & Panics
- **Exercises**
 - Examples generating Oops
 - Capturing Oops
 - Analysing Oops to debug

Day - 2

- **Session 3: Kernel Hacking Options**
 - Dynamically Enabling/Disabling Debug Logs
 - Debugging Stack Overflow
 - Debugging Lockups & Deadlocks
- **Exercises**
 - Dynamically Enabling/Disabling Debug Logs
 - Debugging Stack Overflow
 - Debugging Lockups & Deadlocks
- **Session 4: Kernel Debuggers**
 - System call tracing
 - Kernel Function Tracing
- **Exercises**
 - Playing w/ gdb
 - Debugging using kdb
 - Debugging using kgdb & gdb

- **Session 5: Tracing**

- gdb Overview
- kdb Debugging
- Remote Debugging w/ kgdb

- **Exercises**

- stracing applications
- Experimenting w/ Function Tracer

- **Session 5: Live Bug Fixing**

- kprobe
- jprobe & kretprobe

- **Exercises**

- Bug fixing using kprobe / jprobe / kretprobe