FAST NUCES

Assignment : 3

Installing Kernel with Shell Scripting

Submitted By:
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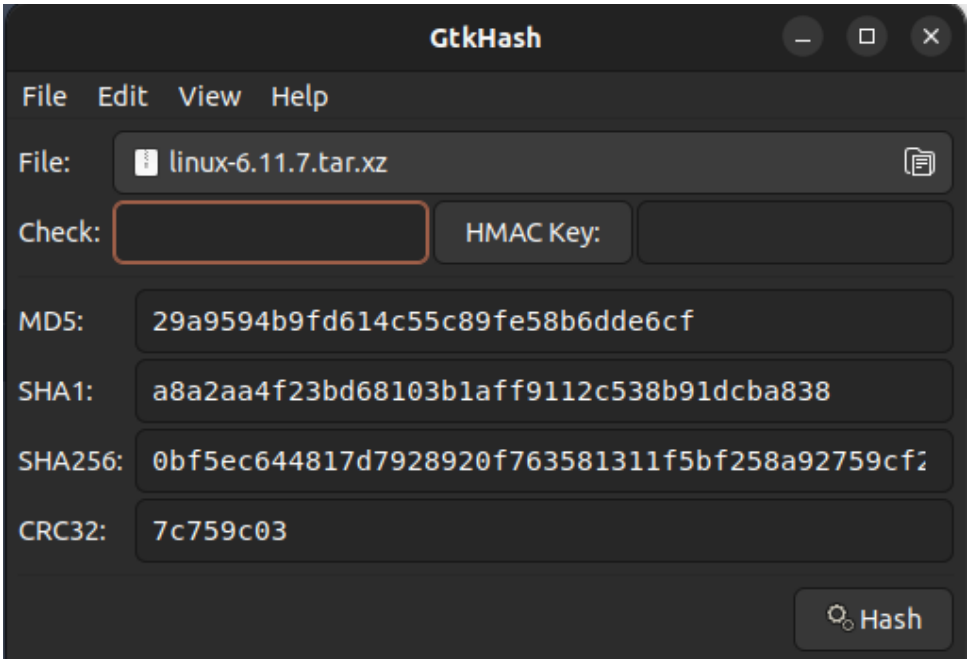
Roll Number: 22P-9278

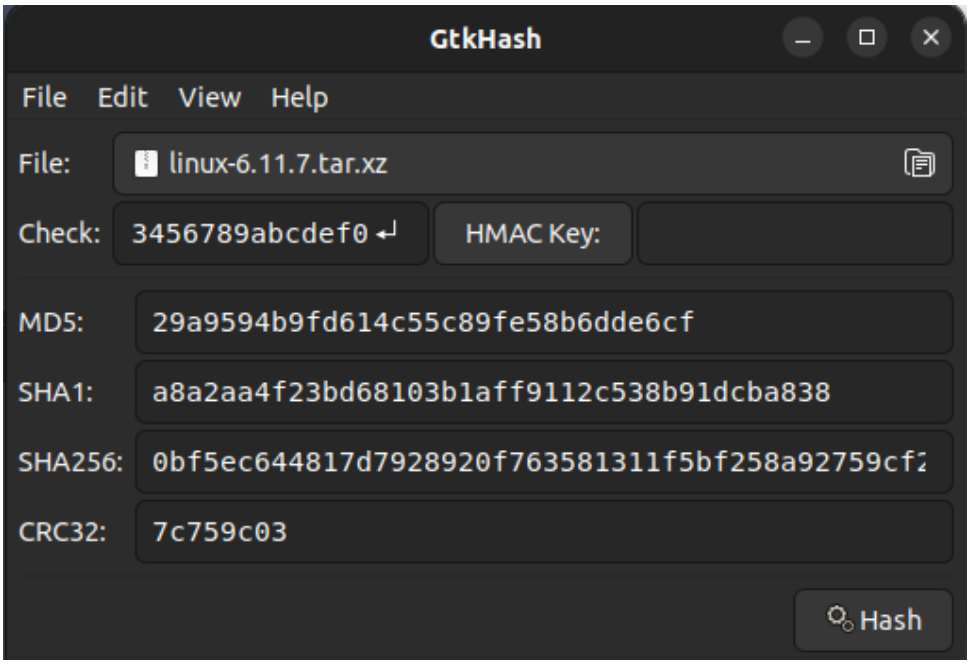
Submitted To:
Saad Ahmad

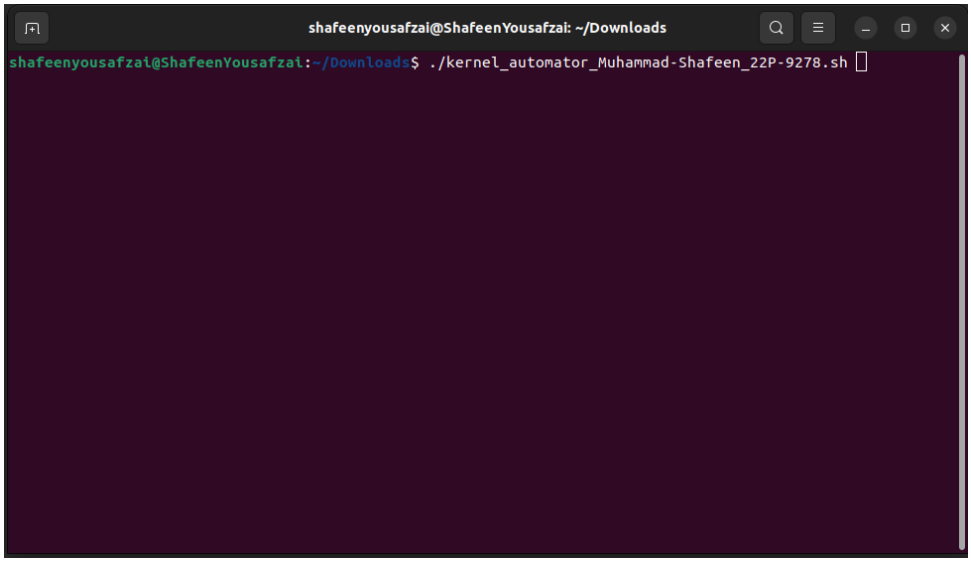
Department of Computer Science
FAST NUCES

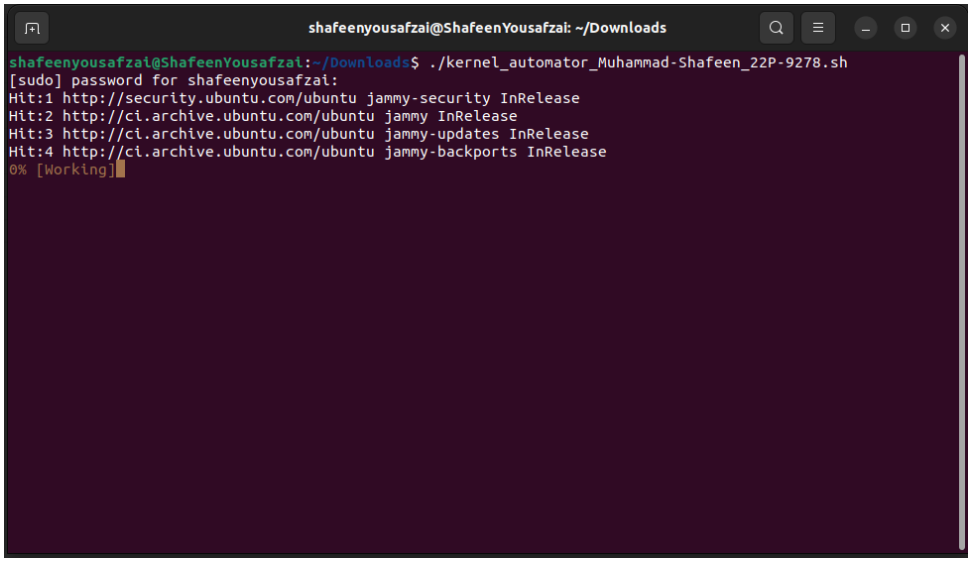
Fall 2024

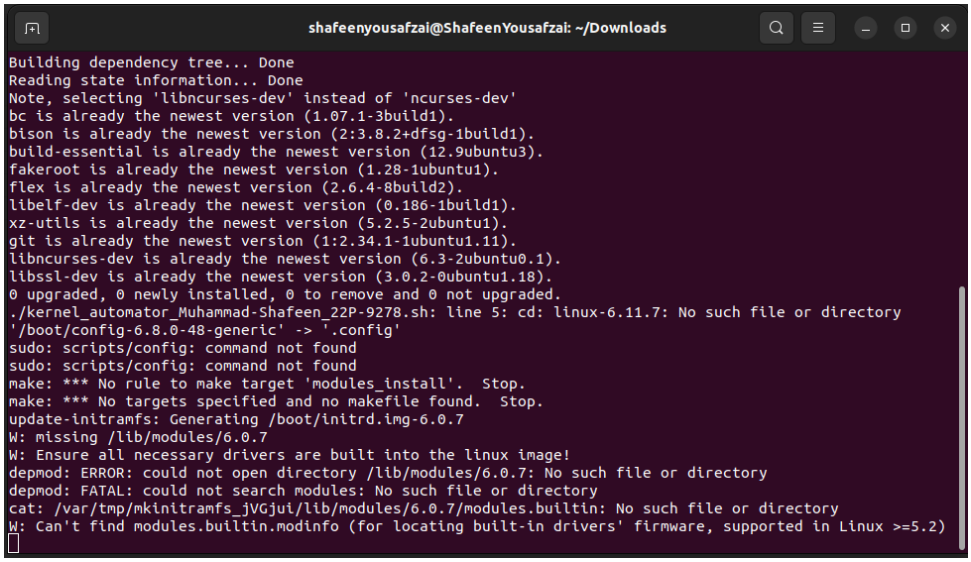
Screenshots :

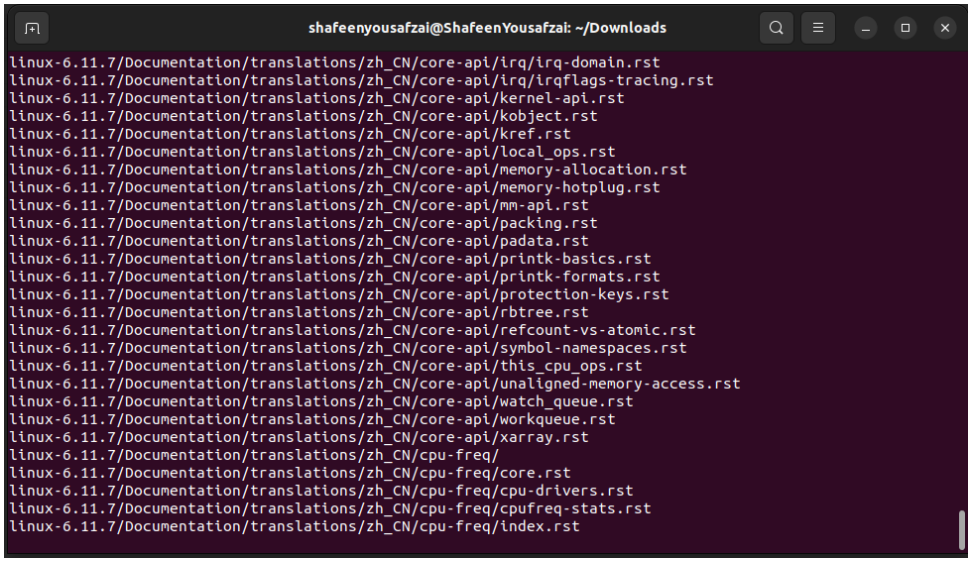





shafeenyousafzai@ShafeenYousafzai: ~/Downloads
shafeenyousafzai@ShafeenYousafzai:~/Downloads$ ./kernel_automator_Muhammad-Shafeen_22P-9278.sh


shafeenyousafzai@ShafeenYousafzai: ~/Downloads
shafeenyousafzai@ShafeenYousafzai:~/Downloads$ ./kernel_automator_Muhammad-Shafeen_22P-9278.sh
[sudo] password for shafeenyousafzai:
Hit:1 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:2 http://ci.archive.ubuntu.com/ubuntu jammy InRelease
Hit:3 http://ci.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:4 http://ci.archive.ubuntu.com/ubuntu jammy-backports InRelease
0% [Working]


shafeenyousafzai@ShafeenYousafzai: ~/Downloads
Building dependency tree... Done
Reading state information... Done
Note, selecting 'libncurses-dev' instead of 'ncurses-dev'
bc is already the newest version (1.07.1-3build1).
bison is already the newest version (2:3.8.2+dfsg-1build1).
build-essential is already the newest version (12.9ubuntu3).
fakeroot is already the newest version (1.28-1ubuntu1).
flex is already the newest version (2.6.4-8build2).
libelf-dev is already the newest version (0.186-1build1).
xz-utils is already the newest version (5.2.5-2ubuntu1).
git is already the newest version (1:2.34.1-1ubuntu1.11).
libncurses-dev is already the newest version (6.3-2ubuntu0.1).
libssl-dev is already the newest version (3.0.2-0ubuntu1.18).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
./kernel_automator_Muhammad-Shafeen_22P-9278.sh: line 5: cd: linux-6.11.7: No such file or directory
'/boot/config-6.8.0-48-generic' -> '.config'
sudo: scripts/config: command not found
sudo: scripts/config: command not found
make: *** No rule to make target 'modules_install'. Stop.
make: *** No targets specified and no makefile found. Stop.
update-initramfs: Generating /boot/initrd.img-6.0.7
W: missing /lib/modules/6.0.7
W: Ensure all necessary drivers are built into the linux image!
depmod: ERROR: could not open directory /lib/modules/6.0.7: No such file or directory
depmod: FATAL: could not search modules: No such file or directory
cat: /var/tmp/mkinitramfs_jVGjui/lib/modules/6.0.7/modules.builtin: No such file or directory
W: Can't find modules.builtin.modinfo (for locating built-in drivers' firmware, supported in Linux >=5.2)


shafeenyousafzai@ShafeenYousafzai: ~/Downloads
linux-6.11.7/Documentation/translations/zh_CN/core-api/irq/irq-domain.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/irq/irqflags-tracing.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/kernel-api.rst
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linux-6.11.7/Documentation/translations/zh_CN/core-api/local_ops.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/memory-allocation.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/memory-hotplug.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/mm-api.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/packing.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/padata.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/printk-basics.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/printk-formats.rst
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linux-6.11.7/Documentation/translations/zh_CN/core-api/rbtree.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/refcount-vs-atomic.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/symbol-namespaces.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/this_cpu_ops.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/unaligned-memory-access.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/watch_queue.rst
linux-6.11.7/Documentation/translations/zh_CN/core-api/workqueue.rst
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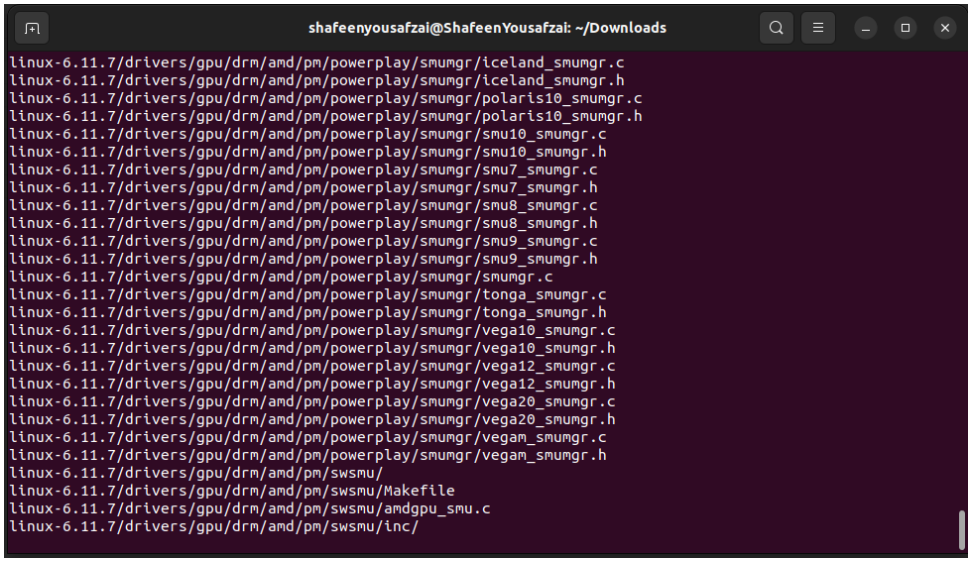
linux-6.11.7/Documentation/translations/zh_CN/cpu-freq/
linux-6.11.7/Documentation/translations/zh_CN/cpu-freq/core.rst
linux-6.11.7/Documentation/translations/zh_CN/cpu-freq/cpu-drivers.rst
linux-6.11.7/Documentation/translations/zh_CN/cpu-freq/cpufreq-stats.rst
linux-6.11.7/Documentation/translations/zh_CN/cpu-freq/index.rst


shafeenyousafzai@ShafeenYousafzai: ~/Downloads
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/iceland_smumgr.c
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/iceland_smumgr.h
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/polaris10_smumgr.c
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/polaris10_smumgr.h
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/smu10_smumgr.c
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/smu10_smumgr.h
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/smu7_smumgr.c
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/smu7_smumgr.h
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/smu8_smumgr.c
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/smu8_smumgr.h
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/smu9_smumgr.c
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/smu9_smumgr.h
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/smumgr.c
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/tonga_smumgr.c
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/tonga_smumgr.h
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/vega10_smumgr.c
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/vega10_smumgr.h
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linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/vega12_smumgr.h
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/vega20_smumgr.c
linux-6.11.7/drivers/gpu/drm/amd/pm/powerplay/smumgr/vega20_smumgr.h
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linux-6.11.7/drivers/gpu/drm/amd/pm/swsmu/Makefile
linux-6.11.7/drivers/gpu/drm/amd/pm/swsmu/amdgpu_smu.c
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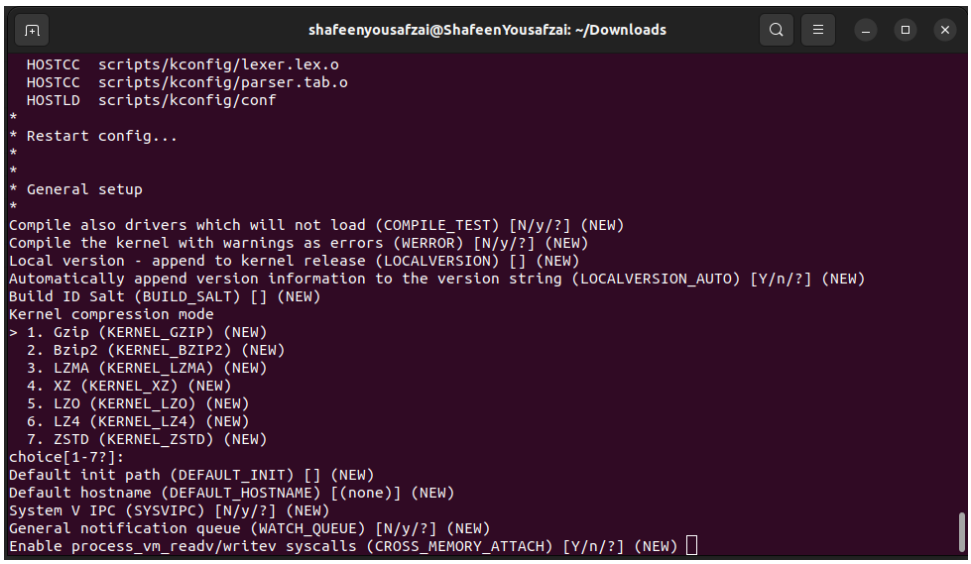
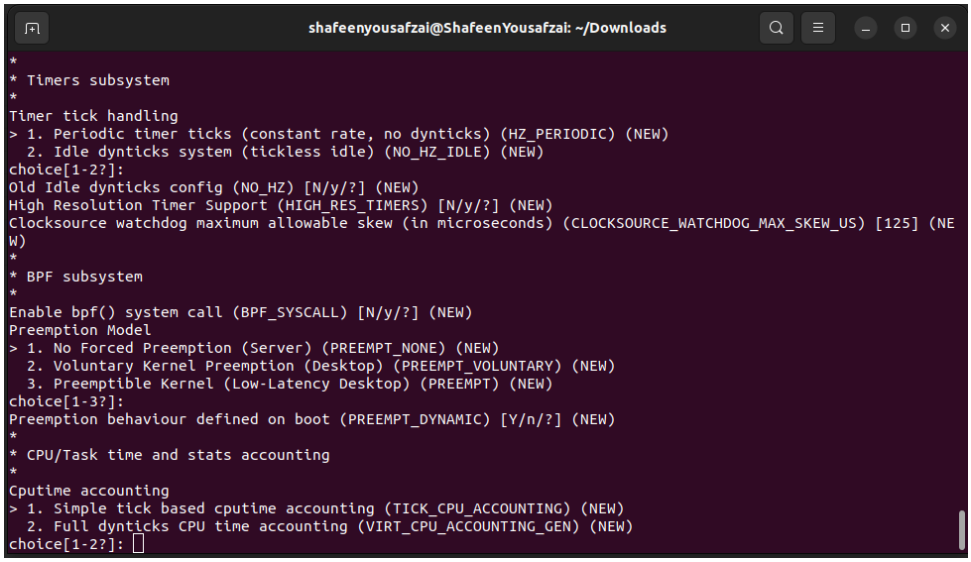
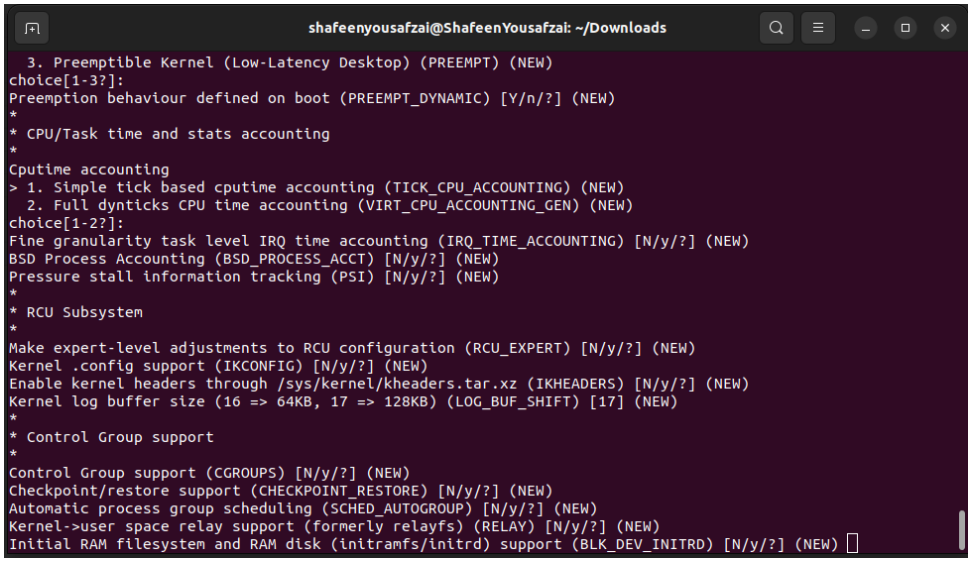
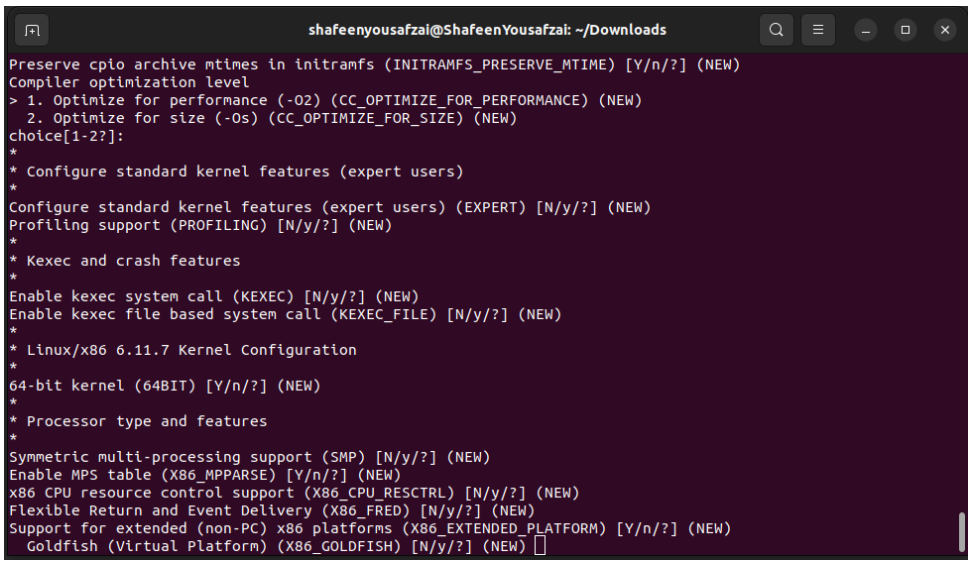
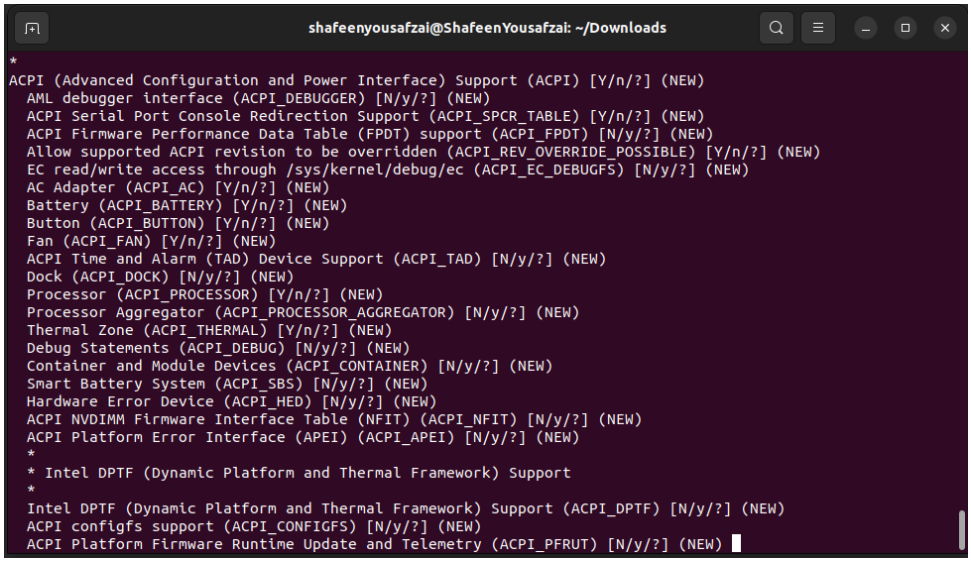
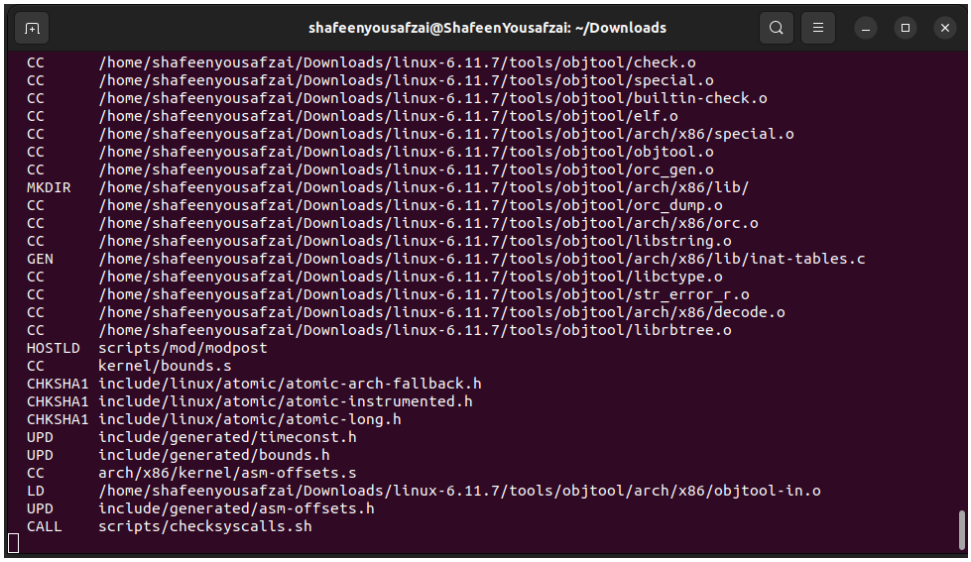

shafeenyousafzai@ShafeenYousafzai: ~/Downloads
HOSTCC scripts/kconfig/lexer.lex.o
HOSTCC scripts/kconfig/parser.tab.o
HOSTLD scripts/kconfig/conf
*
* Restart config...
*
*
* General setup
*
Compile also drivers which will not load (COMPILE_TEST) [N/y/?] (NEW)
Compile the kernel with warnings as errors (WERROR) [N/y/?] (NEW)
Local version - append to kernel release (LOCALVERSION) [] (NEW)
Automatically append version information to the version string (LOCALVERSION_AUTO) [Y/n/?] (NEW)
Build ID Salt (BUILD_SALT) [] (NEW)
Kernel compression mode
> 1. Gzip (KERNEL_GZIP) (NEW)
2. Bzip2 (KERNEL_BZIP2) (NEW)
3. LZMA (KERNEL_LZMA) (NEW)
4. XZ (KERNEL_XZ) (NEW)
5. LZO (KERNEL_LZO) (NEW)
6. LZ4 (KERNEL_LZ4) (NEW)
7. ZSTD (KERNEL_ZSTD) (NEW)
choice[1-7?]:
Default init path (DEFAULT_INIT) [] (NEW)
Default hostname (DEFAULT_HOSTNAME) [(none)] (NEW)
System V IPC (SYSVIPC) [N/y/?] (NEW)
General notification queue (WATCH_QUEUE) [N/y/?] (NEW)
Enable process_vm_readv/writev syscalls (CROSS_MEMORY_ATTACH) [Y/n/?] (NEW)

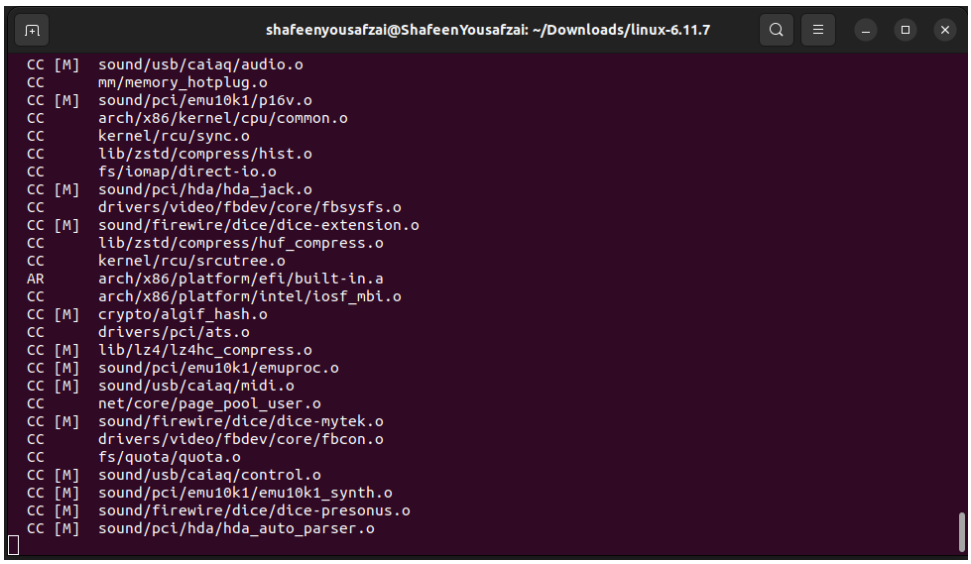

shafeenyousafzai@ShafeenYousafzai: ~/Downloads
*
* Timers subsystem
*
Timer tick handling
> 1. Periodic timer ticks (constant rate, no dynticks) (HZ_PERIODIC) (NEW)
  2. Idle dynticks system (tickless idle) (NO_HZ_IDLE) (NEW)
choice[1-2?]:
Old Idle dynticks config (NO_HZ) [N/y/?] (NEW)
High Resolution Timer Support (HIGH_RES_TIMERS) [N/y/?] (NEW)
Clocksource watchdog maximum allowable skew (in microseconds) (CLOCKSOURCE_WATCHDOG_MAX_SKEW_US) [125] (NE
W)
*
* BPF subsystem
*
Enable bpf() system call (BPF_SYSCALL) [N/y/?] (NEW)
Preemption Model
> 1. No Forced Preemption (Server) (PREEMPT_NONE) (NEW)
  2. Voluntary Kernel Preemption (Desktop) (PREEMPT_VOLUNTARY) (NEW)
  3. Preemptible Kernel (Low-Latency Desktop) (PREEMPT) (NEW)
choice[1-3?]:
Preemption behaviour defined on boot (PREEMPT_DYNAMIC) [Y/n/?] (NEW)
*
* CPU/Task time and stats accounting
*
Cputime accounting
> 1. Simple tick based cputime accounting (TICK_CPU_ACCOUNTING) (NEW)
  2. Full dynticks CPU time accounting (VIRT_CPU_ACCOUNTING_GEN) (NEW)
choice[1-2?]:

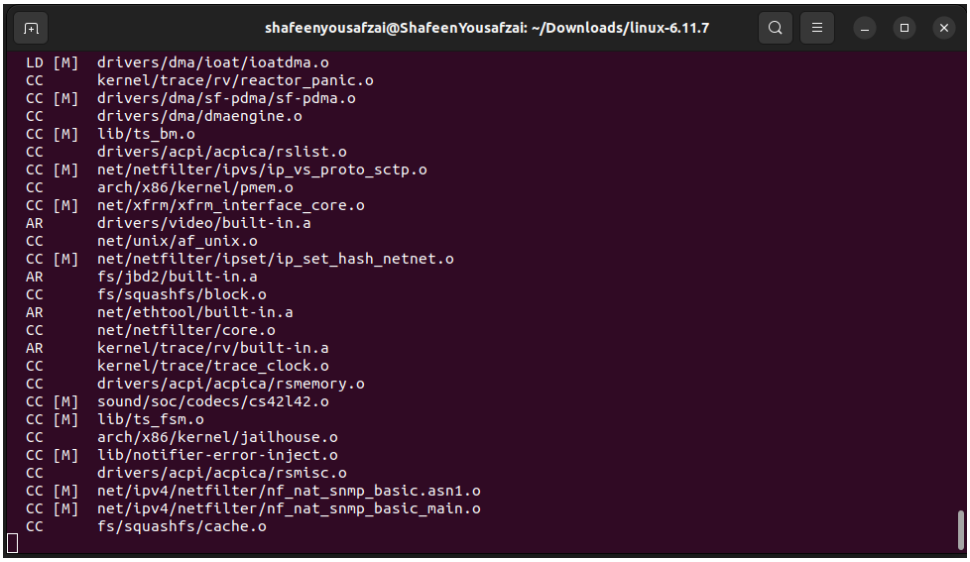

shafeenyousafzai@ShafeenYousafzai: ~/Downloads
  3. Preemptible Kernel (Low-Latency Desktop) (PREEMPT) (NEW)
choice[1-3?]:
Preemption behaviour defined on boot (PREEMPT_DYNAMIC) [Y/n/?] (NEW)
*
* CPU/Task time and stats accounting
*
Cputime accounting
> 1. Simple tick based cputime accounting (TICK_CPU_ACCOUNTING) (NEW)
  2. Full dynticks CPU time accounting (VIRT_CPU_ACCOUNTING_GEN) (NEW)
choice[1-2?]:
Fine granularity task level IRQ time accounting (IRQ_TIME_ACCOUNTING) [N/y/?] (NEW)
BSD Process Accounting (BSD_PROCESS_ACCT) [N/y/?] (NEW)
Pressure stall information tracking (PSI) [N/y/?] (NEW)
*
* RCU Subsystem
*
Make expert-level adjustments to RCU configuration (RCU_EXPERT) [N/y/?] (NEW)
Kernel .config support (IKCONFIG) [N/y/?] (NEW)
Enable kernel headers through /sys/kernel/kheaders.tar.xz (IKHEADERS) [N/y/?] (NEW)
Kernel log buffer size (16 => 64KB, 17 => 128KB) (LOG_BUF_SHIFT) [17] (NEW)
*
* Control Group support
*
Control Group support (CGROUPS) [N/y/?] (NEW)
Checkpoint/restore support (CHECKPOINT_RESTORE) [N/y/?] (NEW)
Automatic process group scheduling (SCHED_AUTOGROUP) [N/y/?] (NEW)
Kernel->user space relay support (formerly relayfs) (RELAY) [N/y/?] (NEW)
Initial RAM filesystem and RAM disk (initramfs/initrd) support (BLK_DEV_INITRD) [N/y/?] (NEW)

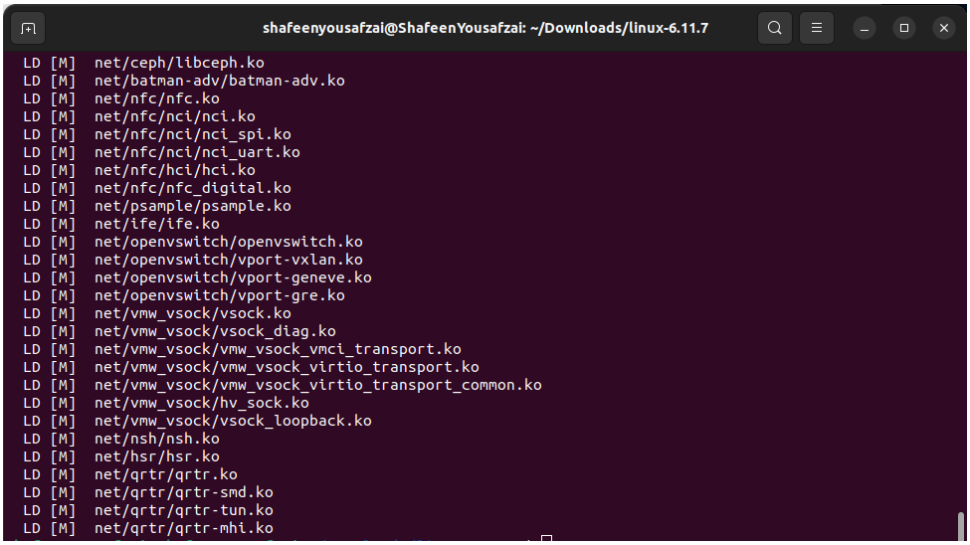

shafeenyousafzai@ShafeenYousafzai: ~/Downloads
Preserve cpio archive mtimes in initramfs (INITRAMFS_PRESERVE_MTIME) [Y/n/?] (NEW)
Compiler optimization level
> 1. Optimize for performance (-O2) (CC_OPTIMIZE_FOR_PERFORMANCE) (NEW)
  2. Optimize for size (-Os) (CC_OPTIMIZE_FOR_SIZE) (NEW)
choice[1-2?]:
*
* Configure standard kernel features (expert users)
*
Configure standard kernel features (expert users) (EXPERT) [N/y/?] (NEW)
Profiling support (PROFILING) [N/y/?] (NEW)
*
* Kexec and crash features
*
Enable kexec system call (KEXEC) [N/y/?] (NEW)
Enable kexec file based system call (KEXEC_FILE) [N/y/?] (NEW)
*
* Linux/x86 6.11.7 Kernel Configuration
*
64-bit kernel (64BIT) [Y/n/?] (NEW)
*
* Processor type and features
*
Symmetric multi-processing support (SMP) [N/y/?] (NEW)
Enable MPS table (X86_MPPARSE) [Y/n/?] (NEW)
x86 CPU resource control support (X86_CPU_RESCTRL) [N/y/?] (NEW)
Flexible Return and Event Delivery (X86_FRED) [N/y/?] (NEW)
Support for extended (non-PC) x86 platforms (X86_EXTENDED_PLATFORM) [Y/n/?] (NEW)
  Goldfish (Virtual Platform) (X86_GOLDFISH) [N/y/?] (NEW)

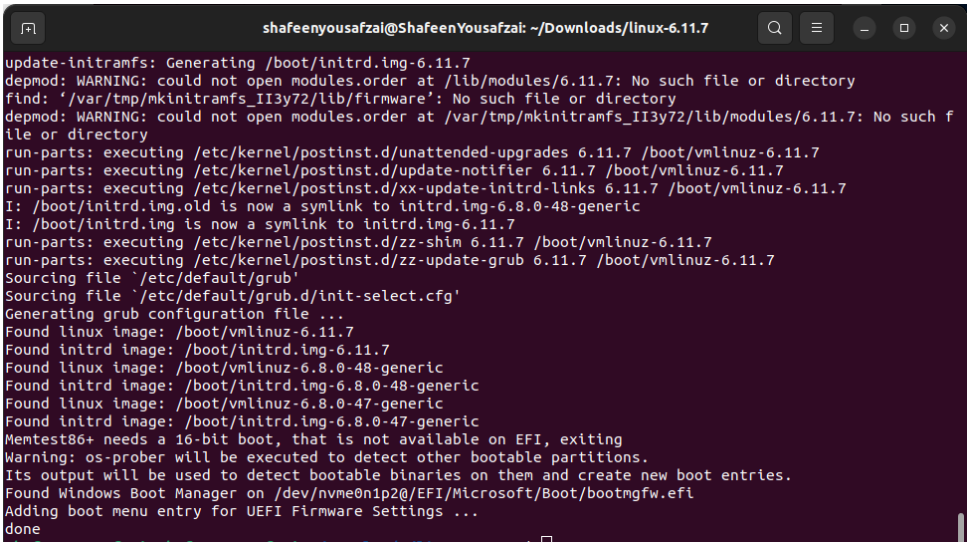

shafeenyousafzai@ShafeenYousafzai: ~/Downloads
*
ACPI (Advanced Configuration and Power Interface) Support (ACPI) [Y/n/?] (NEW)
AML debugger interface (ACPI_DEBUGGER) [N/y/?] (NEW)
ACPI Serial Port Console Redirection Support (ACPI_SPCR_TABLE) [Y/n/?] (NEW)
ACPI Firmware Performance Data Table (FPDT) support (ACPI_FPDT) [N/y/?] (NEW)
Allow supported ACPI revision to be overridden (ACPI_REV_OVERRIDE_POSSIBLE) [Y/n/?] (NEW)
EC read/write access through /sys/kernel/debug/ec (ACPI_EC_DEBUGFS) [N/y/?] (NEW)
AC Adapter (ACPI_AC) [Y/n/?] (NEW)
Battery (ACPI_BATTERY) [Y/n/?] (NEW)
Button (ACPI_BUTTON) [Y/n/?] (NEW)
Fan (ACPI_FAN) [Y/n/?] (NEW)
ACPI Time and Alarm (TAD) Device Support (ACPI_TAD) [N/y/?] (NEW)
Dock (ACPI_DOCK) [N/y/?] (NEW)
Processor (ACPI_PROCESSOR) [Y/n/?] (NEW)
Processor Aggregator (ACPI_PROCESSOR_AGGREGATOR) [N/y/?] (NEW)
Thermal Zone (ACPI_THERMAL) [Y/n/?] (NEW)
Debug Statements (ACPI_DEBUG) [N/y/?] (NEW)
Container and Module Devices (ACPI_CONTAINER) [N/y/?] (NEW)
Smart Battery System (ACPI_SBS) [N/y/?] (NEW)
Hardware Error Device (ACPI_HED) [N/y/?] (NEW)
ACPI NVDIMM Firmware Interface Table (NFIT) (ACPI_NFIT) [N/y/?] (NEW)
ACPI Platform Error Interface (APEI) (ACPI_APEI) [N/y/?] (NEW)
*
* Intel DPTF (Dynamic Platform and Thermal Framework) Support
*
Intel DPTF (Dynamic Platform and Thermal Framework) Support (ACPI_DPTF) [N/y/?] (NEW)
ACPI configfs support (ACPI_CONFIGFS) [N/y/?] (NEW)
ACPI Platform Firmware Runtime Update and Telemetry (ACPI_PFRUT) [N/y/?] (NEW)

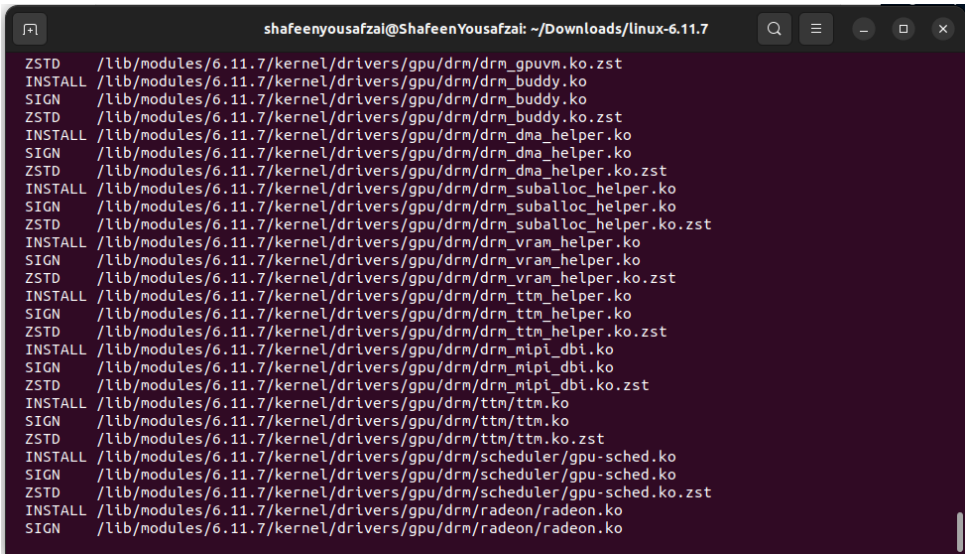

shafeenyousafzai@ShafeenYousafzai: ~/Downloads
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/check.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/special.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/builtin-check.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/elf.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/arch/x86/special.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/objtool.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/orc_gen.o
MKDIR /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/arch/x86/lib/
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/orc_dump.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/arch/x86/orc.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/libstring.o
GEN /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/arch/x86/lib/inat-tables.c
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/libctype.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/str_error_r.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/arch/x86/decode.o
CC /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/librbtree.o
HOSTLD scripts/mod/modpost
CC kernel/bounds.s
CHKSHA1 include/linux/atomic/atomic-arch-fallback.h
CHKSHA1 include/linux/atomic/atomic-instrumented.h
CHKSHA1 include/linux/atomic/atomic-long.h
UPD include/generated/timeconst.h
UPD include/generated/bounds.h
CC arch/x86/kernel/asm-offsets.s
LD /home/shafeenyousafzai/Downloads/linux-6.11.7/tools/objtool/arch/x86/objtool-in.o
UPD include/generated/asm-offsets.h
CALL scripts/checksyscalls.sh

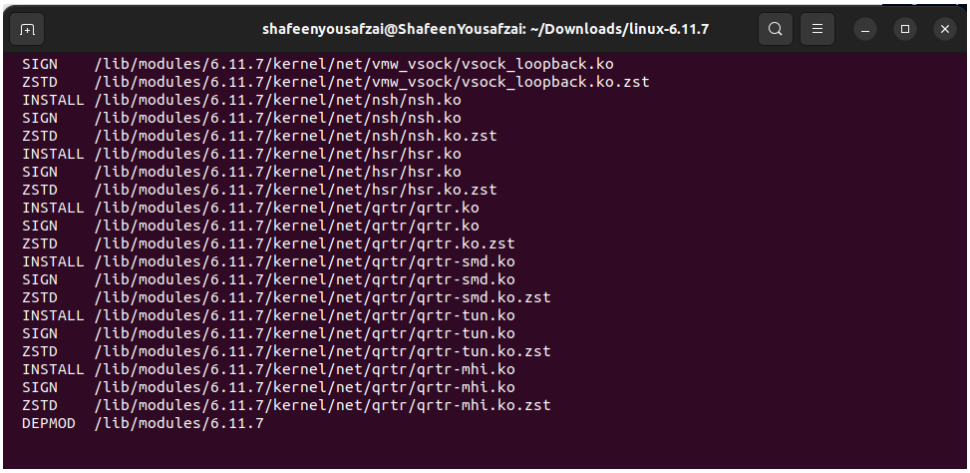

shafeenyousafzai@ShafeenYousafzai: ~/Downloads/linux-6.11.7
CC [M] sound/usb/caiaq/audio.o
CC mm/memory_hotplug.o
CC [M] sound/pci/emu10k1/p16v.o
CC arch/x86/kernel/cpu/common.o
CC kernel/rcu/sync.o
CC lib/zstd/compress/hist.o
CC fs/iomap/direct-io.o
CC [M] sound/pci/hda/hda_jack.o
CC drivers/video/fbdev/core/fbsysfs.o
CC [M] sound/firewire/dice/dice-extension.o
CC lib/zstd/compress/huf_compress.o
CC kernel/rcu/srcutree.o
AR arch/x86/platform/efi/built-in.a
CC arch/x86/platform/intel/iosf_mbi.o
CC [M] crypto/algif_hash.o
CC drivers/pci/ats.o
CC [M] lib/lz4/lz4hc_compress.o
CC [M] sound/pci/emu10k1/emuproc.o
CC [M] sound/usb/caiaq/midi.o
CC net/core/page_pool_user.o
CC [M] sound/firewire/dice/dice-mytek.o
CC drivers/video/fbdev/core/fbcon.o
CC fs/quota/quota.o
CC [M] sound/usb/caiaq/control.o
CC [M] sound/pci/emu10k1/emu10k1_synth.o
CC [M] sound/firewire/dice/dice-presonus.o
CC [M] sound/pci/hda/hda_auto_parser.o

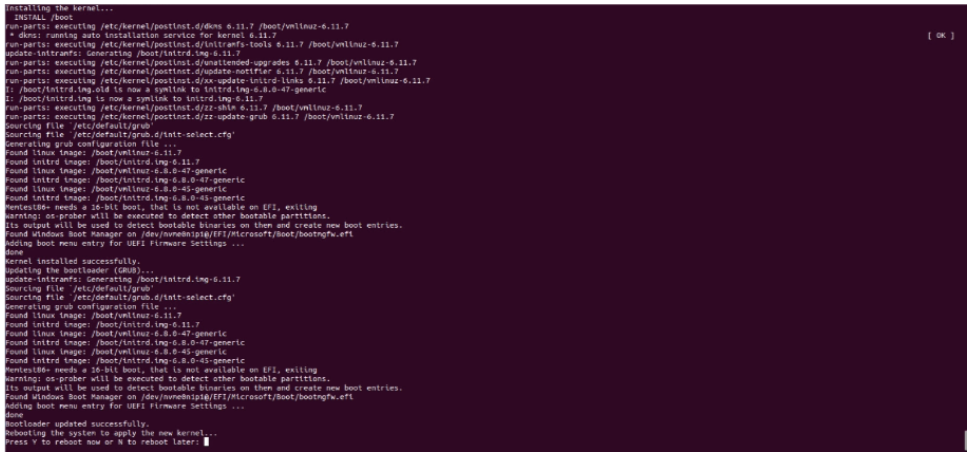
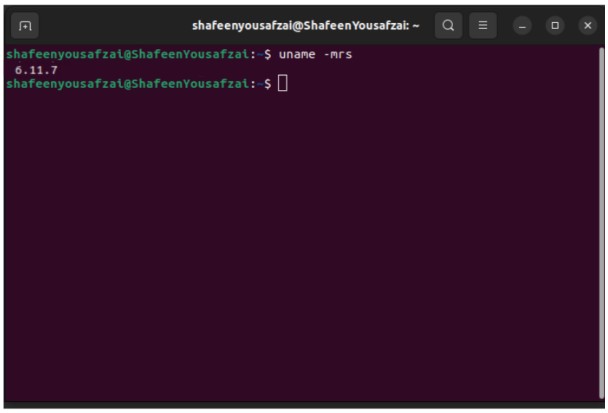

shafeenyousafzai@ShafeenYousafzai: ~/Downloads/linux-6.11.7
LD [M] drivers/dma/ioat/ioatdma.o
CC kernel/trace/rv/reactor_panic.o
CC [M] drivers/dma/sf-pdma/sf-pdma.o
CC drivers/dma/dmaengine.o
CC [M] lib/ts_bm.o
CC drivers/acpi/acpica/rslist.o
CC [M] net/netfilter/ipvs/ip_vs_proto_sctp.o
CC arch/x86/kernel/pmem.o
CC [M] net/xfrm/xfrm_interface_core.o
AR drivers/video/built-in.a
CC net/unix/af_unix.o
CC [M] net/netfilter/ipset/ip_set_hash_netnet.o
AR fs/jbd2/built-in.a
CC fs/squashfs/block.o
AR net/ethtool/built-in.a
CC net/netfilter/core.o
AR kernel/trace/rv/built-in.a
CC kernel/trace/trace_clock.o
CC drivers/acpi/acpica/rsmemory.o
CC [M] sound/soc/codecs/cs42l42.o
CC [M] lib/ts_fsm.o
CC arch/x86/kernel/jailhouse.o
CC [M] lib/notifier-error-inject.o
CC drivers/acpi/acpica/rsmisc.o
CC [M] net/ipv4/netfilter/nf_nat_snmp_basic.asn1.o
CC [M] net/ipv4/netfilter/nf_nat_snmp_basic_main.o
CC fs/squashfs/cache.o


shafeenyousafzai@ShafeenYousafzai: ~/Downloads/linux-6.11.7
LD [M] net/ceph/libceph.ko
LD [M] net/batman-adv/batman-adv.ko
LD [M] net/nfc/nfc.ko
LD [M] net/nfc/nci/nci.ko
LD [M] net/nfc/nci/nci_spi.ko
LD [M] net/nfc/nci/nci_uart.ko
LD [M] net/nfc/hci/hci.ko
LD [M] net/nfc/nfc_digital.ko
LD [M] net/psample/psample.ko
LD [M] net/ife/ife.ko
LD [M] net/openvswitch/openvswitch.ko
LD [M] net/openvswitch/vport-vxlan.ko
LD [M] net/openvswitch/vport-geneve.ko
LD [M] net/openvswitch/vport-gre.ko
LD [M] net/vmw_vsock/vsock.ko
LD [M] net/vmw_vsock/vsock_diag.ko
LD [M] net/vmw_vsock/vmw_vsock_vmci_transport.ko
LD [M] net/vmw_vsock/vmw_vsock_virtio_transport.ko
LD [M] net/vmw_vsock/vmw_vsock_virtio_transport_common.ko
LD [M] net/vmw_vsock/hv_sock.ko
LD [M] net/vmw_vsock/vsock_loopback.ko
LD [M] net/nsh/nsh.ko
LD [M] net/hsr/hsr.ko
LD [M] net/qrtr/qrtr.ko
LD [M] net/qrtr/qrtr-smd.ko
LD [M] net/qrtr/qrtr-tun.ko
LD [M] net/qrtr/qrtr-mhi.ko


shafeenyousafzai@ShafeenYousafzai: ~/Downloads/linux-6.11.7
update-initramfs: Generating /boot/initrd.img-6.11.7
depmod: WARNING: could not open modules.order at /lib/modules/6.11.7: No such file or directory
find: '/var/tmp/mkinitramfs_II3y72/lib/firmware': No such file or directory
depmod: WARNING: could not open modules.order at /var/tmp/mkinitramfs_II3y72/lib/modules/6.11.7: No such file or directory
run-parts: executing /etc/kernel/postinst.d/unattended-upgrades 6.11.7 /boot/vmlinuz-6.11.7
run-parts: executing /etc/kernel/postinst.d/update-notifier 6.11.7 /boot/vmlinuz-6.11.7
run-parts: executing /etc/kernel/postinst.d/xx-update-initrd-links 6.11.7 /boot/vmlinuz-6.11.7
I: /boot/initrd.img.old is now a symlink to initrd.img-6.8.0-48-generic
I: /boot/initrd.img is now a symlink to initrd.img-6.11.7
run-parts: executing /etc/kernel/postinst.d/zz-shim 6.11.7 /boot/vmlinuz-6.11.7
run-parts: executing /etc/kernel/postinst.d/zz-update-grub 6.11.7 /boot/vmlinuz-6.11.7
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-6.11.7
Found initrd image: /boot/initrd.img-6.11.7
Found linux image: /boot/vmlinuz-6.8.0-48-generic
Found initrd image: /boot/initrd.img-6.8.0-48-generic
Found linux image: /boot/vmlinuz-6.8.0-47-generic
Found initrd image: /boot/initrd.img-6.8.0-47-generic
Memtest86+ needs a 16-bit boot, that is not available on EFI, exiting
Warning: os-prober will be executed to detect other bootable partitions.
Its output will be used to detect bootable binaries on them and create new boot entries.
Found Windows Boot Manager on /dev/nvme0n1p2@/EFI/Microsoft/Boot/bootmgfw.efi
Adding boot menu entry for UEFI Firmware Settings ...
done


shafeenyousafzai@ShafeenYousafzai: ~/Downloads/linux-6.11.7
ZSTD /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_gpuvm.ko.zst
INSTALL /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_buddy.ko
SIGN /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_buddy.ko
ZSTD /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_buddy.ko.zst
INSTALL /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_dma_helper.ko
SIGN /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_dma_helper.ko
ZSTD /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_dma_helper.ko.zst
INSTALL /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_suballoc_helper.ko
SIGN /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_suballoc_helper.ko
ZSTD /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_suballoc_helper.ko.zst
INSTALL /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_vram_helper.ko
SIGN /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_vram_helper.ko
ZSTD /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_vram_helper.ko.zst
INSTALL /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_ttm_helper.ko
SIGN /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_ttm_helper.ko
ZSTD /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_ttm_helper.ko.zst
INSTALL /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_mipi_dbi.ko
SIGN /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_mipi_dbi.ko
ZSTD /lib/modules/6.11.7/kernel/drivers/gpu/drm/drm_mipi_dbi.ko.zst
INSTALL /lib/modules/6.11.7/kernel/drivers/gpu/drm/ttm/ttm.ko
SIGN /lib/modules/6.11.7/kernel/drivers/gpu/drm/ttm/ttm.ko
ZSTD /lib/modules/6.11.7/kernel/drivers/gpu/drm/ttm/ttm.ko.zst
INSTALL /lib/modules/6.11.7/kernel/drivers/gpu/drm/scheduler/gpu-sched.ko
SIGN /lib/modules/6.11.7/kernel/drivers/gpu/drm/scheduler/gpu-sched.ko
ZSTD /lib/modules/6.11.7/kernel/drivers/gpu/drm/scheduler/gpu-sched.ko.zst
INSTALL /lib/modules/6.11.7/kernel/drivers/gpu/drm/radeon/radeon.ko
SIGN /lib/modules/6.11.7/kernel/drivers/gpu/drm/radeon/radeon.ko


shafeenyousafzai@ShafeenYousafzai: ~/Downloads/linux-6.11.7
SIGN /lib/modules/6.11.7/kernel/net/vmw_vsock/vsock_loopback.ko
ZSTD /lib/modules/6.11.7/kernel/net/vmw_vsock/vsock_loopback.ko.zst
INSTALL /lib/modules/6.11.7/kernel/net/nsh/nsh.ko
SIGN /lib/modules/6.11.7/kernel/net/nsh/nsh.ko
ZSTD /lib/modules/6.11.7/kernel/net/nsh/nsh.ko.zst
INSTALL /lib/modules/6.11.7/kernel/net/hsr/hsr.ko
SIGN /lib/modules/6.11.7/kernel/net/hsr/hsr.ko
ZSTD /lib/modules/6.11.7/kernel/net/hsr/hsr.ko.zst
INSTALL /lib/modules/6.11.7/kernel/net/qrtr/qrtr.ko
SIGN /lib/modules/6.11.7/kernel/net/qrtr/qrtr.ko
ZSTD /lib/modules/6.11.7/kernel/net/qrtr/qrtr.ko.zst
INSTALL /lib/modules/6.11.7/kernel/net/qrtr/qrtr-smd.ko
SIGN /lib/modules/6.11.7/kernel/net/qrtr/qrtr-smd.ko
ZSTD /lib/modules/6.11.7/kernel/net/qrtr/qrtr-smd.ko.zst
INSTALL /lib/modules/6.11.7/kernel/net/qrtr/qrtr-tun.ko
SIGN /lib/modules/6.11.7/kernel/net/qrtr/qrtr-tun.ko
ZSTD /lib/modules/6.11.7/kernel/net/qrtr/qrtr-tun.ko.zst
INSTALL /lib/modules/6.11.7/kernel/net/qrtr/qrtr-mhi.ko
SIGN /lib/modules/6.11.7/kernel/net/qrtr/qrtr-mhi.ko
ZSTD /lib/modules/6.11.7/kernel/net/qrtr/qrtr-mhi.ko.zst
DEPMOD /lib/modules/6.11.7


Installing the kernel...
INSTALL /boot
run-parts: executing /etc/kernel/postinst.d/dkms 6.11.7 /boot/vmlinuz-6.11.7
* dkms: running auto installation service for kernel 6.11.7
[OK]
run-parts: executing /etc/kernel/postinst.d/initramfs-tools 6.11.7 /boot/vmlinuz-6.11.7
update-initramfs: Generating /boot/initrd.img-6.11.7
run-parts: executing /etc/kernel/postinst.d/unattended-upgrades 6.11.7 /boot/vmlinuz-6.11.7
run-parts: executing /etc/kernel/postinst.d/update-notifier 6.11.7 /boot/vmlinuz-6.11.7
run-parts: executing /etc/kernel/postinst.d/xx-update-initrd-links 6.11.7 /boot/vmlinuz-6.11.7
I: /boot/initrd.img.old is now a symlink to initrd.img-6.8.0-47-generic
I: /boot/initrd.img is now a symlink to initrd.img-6.11.7
run-parts: executing /etc/kernel/postinst.d/zz-shim 6.11.7 /boot/vmlinuz-6.11.7
run-parts: executing /etc/kernel/postinst.d/zz-update-grub 6.11.7 /boot/vmlinuz-6.11.7
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-6.11.7
Found initrd image: /boot/initrd.img-6.11.7
Found linux image: /boot/vmlinuz-6.8.0-47-generic
Found initrd image: /boot/initrd.img-6.8.0-47-generic
Found linux image: /boot/vmlinuz-6.8.0-45-generic
Found initrd image: /boot/initrd.img-6.8.0-45-generic
Memtest86+ needs a 16-bit boot, that is not available on EFI, exiting
Warning: os-prober will be executed to detect other bootable partitions.
Its output will be used to detect bootable binaries on them and create new boot entries.
Found Windows Boot Manager on /dev/nvme0n1p1@/EFI/Microsoft/Boot/bootmgfw.efi
Adding boot menu entry for UEFI Firmware Settings ...
done
Kernel installed successfully.
Updating the bootloader (GRUB)...
update-initramfs: Generating /boot/initrd.img-6.11.7
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-6.11.7
Found initrd image: /boot/initrd.img-6.11.7
Found linux image: /boot/vmlinuz-6.8.0-47-generic
Found initrd image: /boot/initrd.img-6.8.0-47-generic
Found linux image: /boot/vmlinuz-6.8.0-45-generic
Found initrd image: /boot/initrd.img-6.8.0-45-generic
Memtest86+ needs a 16-bit boot, that is not available on EFI, exiting
Warning: os-prober will be executed to detect other bootable partitions.
Its output will be used to detect bootable binaries on them and create new boot entries.
Found Windows Boot Manager on /dev/nvme0n1p1@/EFI/Microsoft/Boot/bootmgfw.efi
Adding boot menu entry for UEFI Firmware Settings ...
done
Bootloader updated successfully.
Rebooting the system to apply the new kernel...
Press Y to reboot now or N to reboot later:

Ensuring Kernel Installation :