

Experiment No. 04

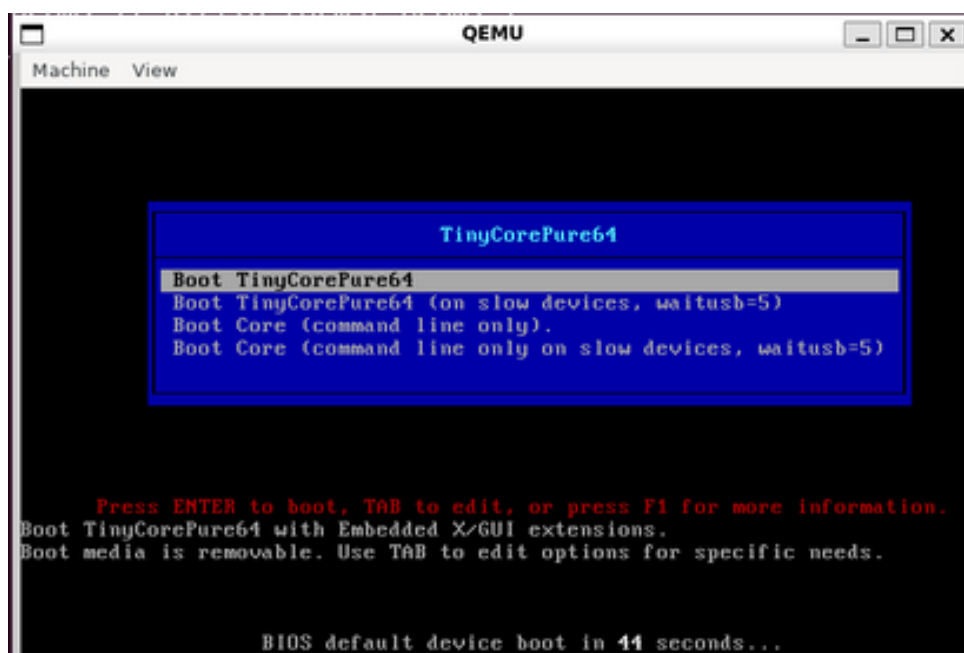
1. KVM Check

```
ratik@LAPTOP-3IU48G55:~$ kvm-ok
INFO: /dev/kvm exists
KVM acceleration can be used
ratik@LAPTOP-3IU48G55:~$
```

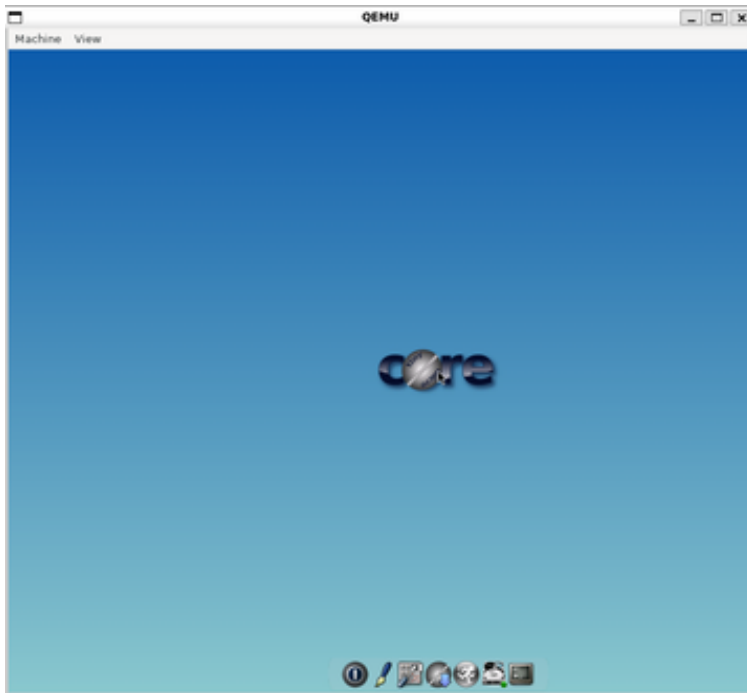
2. With KVM Boot

```
ratik@LAPTOP-3IU48G55:~$ sudo qemu-system-x86_64 -enable-kvm -m 1024 -smp 2 -cpu host \
-drive file=tcl.qcow2,if=virtio,format=qcow2 \
-cdrom ~/isos/TinyCorePure64-13.1.iso -boot d -display default
```

TinyCore boot menu



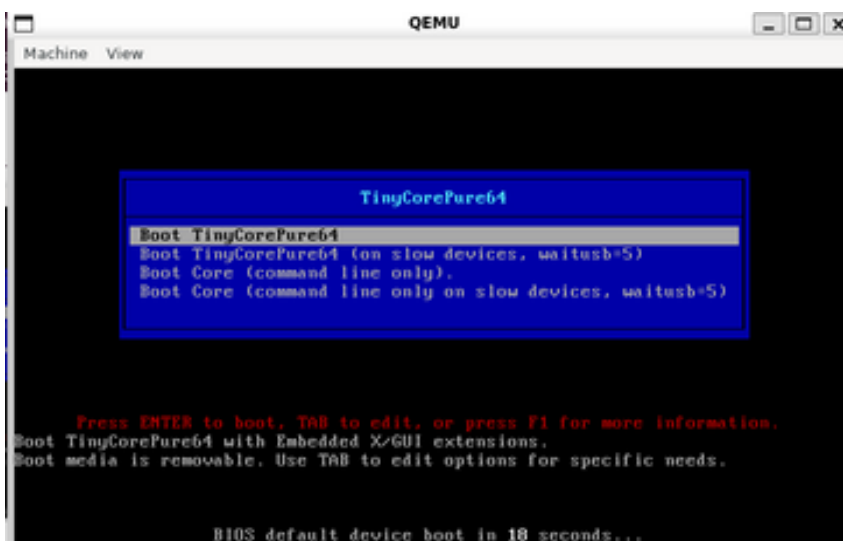
Proof: VM fast boot hua with KVM.



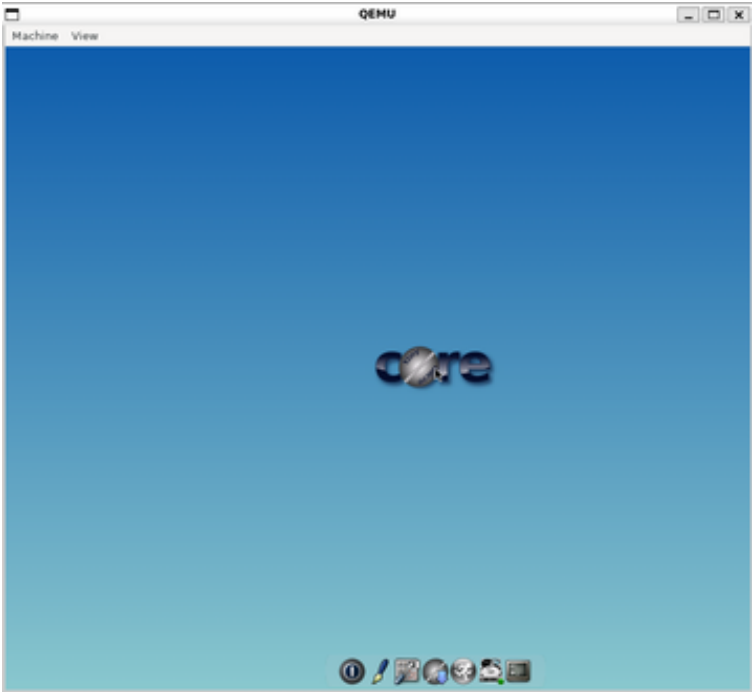
3. Without KVM Boot

```
ratik@LAPTOP-3IU48G55:~$ qemu-system-x86_64 -m 1024 -smp 2 \
-drive file=tcl.qcow2,if=virtio,format=qcow2 \
-cdrom ~/isos/TinyCorePure64-13.1.iso -boot d -display default
```

Boot menu slow



Proof: Without KVM slow



Performance Comparison Table

Case	Boot Time (Approx)	CPU Usage (Host)	Responsiveness / Observations
With KVM	5–10 seconds	~15%	Fast boot, smooth GUI, low CPU load
Without KVM	30–60 seconds	~60–70%	Slow boot, laggy GUI, high CPU usage