

Tina Borundia
C1-16
Practical 1

Source File :

```
#!/bin/bash
echo "Display linux system information"
uname -a
echo
"=====
====="
```

```
echo "Display Kernel information"
uname -r
echo
"=====
====="
```

```
echo "Show which version of red Hat installed"
cat /etc/os-release
echo
"=====
====="
```

```
echo "Show how long the system has been running + loading"
uptime
echo
"=====
====="
```

```
echo "Show system host name"
hostname
echo
"=====
====="
```

```
=====
=====
```

echo "Show all local IP address of the host"

hostname -I

echo

```
"=====
=====
=====
```

echo "Show system reboot history"

last reboot

echo

```
"=====
=====
=====
```

echo "Show current date and time"

date

echo

```
"=====
=====
=====
```

echo "Show this month's calender"

cal

echo

```
"=====
=====
=====
```

echo "Display who is online"

w

echo

```
"=====
```

```
=====
=====
```

echo "Who you are logged in as"

whoami

echo

```
"=====
=====
=====
```

echo "Display the user and group ids of your current user"

id

echo

```
"=====
=====
=====
```

echo "Display the last user who have logged onto the system"

system. last

echo

```
"=====
=====
=====
```

echo "Show Who is logged into the system"

who

echo

```
"=====
=====
=====
```

echo "Display CPU information"

cat /proc/cpuinfo

```
echo
"=====
=====
====="
```

```
echo "Display the last user who have been logged onto the system"
cat /proc/meminfo
echo
"=====
=====
====="
```

```
echo "Display free and used memory"
free -h
echo
"=====
=====
====="
```

```
echo "Display PCI devicesr GB.)"
lspci -tv
echo
"=====
=====
====="
```

```
echo "Display USB devices"
lsusb -tv
echo
"=====
=====
====="
```

```
echo "Display Context Switching between processor"
cat /proc/stat
```

echo

```
"=====
=====
====="
```

Output :

```
=====
rcoem@rcoem-Vostro-3910:~/c1tina$ ./Tinaprac1.sh
Display linux system information
Linux rcoem-Vostro-3910 5.15.0-46-generic #49~20.04.1-Ubuntu SMP Thu Aug 4 19:15:44 UTC 2022
x86_64 x86_64 x86_64 GNU/Linux
```

```
=====
Display Kernel information
5.15.0-46-generic
=====
```

```
Show which version of red Hat installed
NAME="Ubuntu"
VERSION="20.04.5 LTS (Focal Fossa)"
ID=ubuntu
ID_LIKE=debian
PRETTY_NAME="Ubuntu 20.04.5 LTS"
VERSION_ID="20.04"
HOME_URL="https://www.ubuntu.com/"
SUPPORT_URL="https://help.ubuntu.com/"
BUG_REPORT_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-policy"
VERSION_CODENAME=focal
UBUNTU_CODENAME=focal
=====
```

```
Show how long the system has been running + loading
16:11:28 up 1:27, 1 user, load average: 0.07, 0.13, 0.13
=====
```

```
Show system host name
rcoem-Vostro-3910
=====
=====
```

```
Show all local IP address of the host
172.16.192.164
=====
=====
```

```
Show system reboot history
reboot system boot 5.15.0-46-generi Mon Jan 29 20:14 still running
reboot system boot 5.15.0-46-generi Thu Jan 25 14:30 - 17:16 (02:45)
```

```
reboot system boot 5.15.0-46-generi Thu Jan 25 10:06 - 13:01 (02:54)
reboot system boot 5.15.0-46-generi Thu Jan 25 14:46 - 10:01 (-4:45)
reboot system boot 5.15.0-46-generi Tue Jan 23 10:15 - 10:16 (00:00)
reboot system boot 5.15.0-46-generi Sat Jan 20 16:44 - 12:50 (-3:53)
reboot system boot 5.15.0-46-generi Sat Jan 20 07:01 - 07:02 (00:00)
reboot system boot 5.15.0-46-generi Sat Jan 20 03:44 - 05:31 (01:46)
reboot system boot 5.15.0-46-generi Fri Jan 19 10:35 - 10:36 (00:00)
```

wtmp begins Fri Jan 19 10:35:55 2024

```
=====
=====
Show current date and time
Monday 29 January 2024 04:11:28 PM IST
=====
=====
```

Show this month's calender

```
January 2024
Su Mo Tu We Th Fr Sa
    1  2  3  4  5  6
 7  8  9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30 31
```

```
=====
=====
Display who is online
```

```
16:11:28 up 1:27, 1 user, load average: 0.07, 0.13, 0.13
USER  TTY      FROM          LOGIN@  IDLE   JCPU   PCPU   WHAT
rcoem  :0        :0            20:14  ?xdm?  6:01   0.01s /usr/lib/gdm3/gdm-x-session --run-script env
GNOME_SHELL_SESSION_MODE=ubuntu /usr/bin/gnome-session --s
=====
=====
```

Who you are logged in as

rcoem

```
=====
=====
Display the user and group ids of your current user
```

```
uid=1000(rcoem) gid=1000(rcoem)
groups=1000(rcoem),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),120(lpadmin),132(lxd),133(sambas
hare)
=====
=====
```

Display the last user who have logged onto the system

```
./Tinaprac1.sh: line 52: system.: command not found
=====
=====
```

Show Who is logged into the system

```
rcoem  :0        2024-01-29 20:14 (:0)
```

=====

=====

Display CPU information

processor : 0
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 942.904
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 0
cpu cores : 12
apicid : 0
initial apicid : 0
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vapid ept vpid unrestricted_guest vapid_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 1
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c

cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 0
cpu cores : 12
apicid : 1
initial apicid : 1
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vpic ept vpid unrestricted_guest vpic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 2
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 4
cpu cores : 12
apicid : 8
initial apicid : 8
fpu : yes
fpu_exception : yes

cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vapic ept vpid unrestricted_guest vapic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 3
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 4
cpu cores : 12
apicid : 9
initial apicid : 9
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp

hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vpic ept vpid unrestricted_guest vpic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 4
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 8
cpu cores : 12
apicid : 16
initial apicid : 16
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vpic ept vpid unrestricted_guest vpic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual

power management:

processor : 5
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 8
cpu cores : 12
apicid : 17
initial apicid : 17
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vapic ept vpid unrestricted_guest vapic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 6
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 934.118

cache size : 25600 KB
physical id : 0
siblings : 20
core id : 12
cpu cores : 12
apicid : 24
initial apicid : 24
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vapic ept vpid unrestricted_guest vapic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 7
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 12
cpu cores : 12
apicid : 25
initial apicid : 25
fpu : yes
fpu_exception : yes
cpuid level : 32

wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtpr mtf vapic ept vpid unrestricted_guest vapic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 8
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 999.802
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 16
cpu cores : 12
apicid : 32
initial apicid : 32
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes

flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp

hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vpic ept vpid unrestricted_guest vpic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 9
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 16
cpu cores : 12
apicid : 33
initial apicid : 33
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vpic ept vpid unrestricted_guest vpic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual

power management:

processor : 10
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 1002.014
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 20
cpu cores : 12
apicid : 40
initial apicid : 40
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vapic ept vpid unrestricted_guest vapic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 11
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000

cache size : 25600 KB
physical id : 0
siblings : 20
core id : 20
cpu cores : 12
apicid : 41
initial apicid : 41
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vapic ept vpid unrestricted_guest vapic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 12
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 939.678
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 24
cpu cores : 12
apicid : 48
initial apicid : 48
fpu : yes
fpu_exception : yes
cpuid level : 32

wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vapic ept vpid unrestricted_guest vapic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 13
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 24
cpu cores : 12
apicid : 49
initial apicid : 49
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes

flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp

hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vpic ept vpid unrestricted_guest vpic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 14
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 28
cpu cores : 12
apicid : 56
initial apicid : 56
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vpic ept vpid unrestricted_guest vpic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual

power management:

processor : 15
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 28
cpu cores : 12
apicid : 57
initial apicid : 57
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vapic ept vpid unrestricted_guest vapic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 16
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000

cache size : 25600 KB
physical id : 0
siblings : 20
core id : 36
cpu cores : 12
apicid : 72
initial apicid : 72
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vapic ept vpid unrestricted_guest vapic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 17
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 37
cpu cores : 12
apicid : 74
initial apicid : 74
fpu : yes
fpu_exception : yes
cpuid level : 32

wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtpr mtf vapic ept vpid unrestricted_guest vapic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 18
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 38
cpu cores : 12
apicid : 76
initial apicid : 76
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes

flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp

hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vpic ept vpid unrestricted_guest vpic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual
power management:

processor : 19
vendor_id : GenuineIntel
cpu family : 6
model : 151
model name : 12th Gen Intel(R) Core(TM) i7-12700
stepping : 2
microcode : 0x2c
cpu MHz : 2100.000
cache size : 25600 KB
physical id : 0
siblings : 20
core id : 39
cpu cores : 12
apicid : 78
initial apicid : 78
fpu : yes
fpu_exception : yes
cpuid level : 32
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi
mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single
ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1
avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1
xsaves split_lock_detect avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp
hwp_pkg_req umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear
serialize pconfig arch_lbr flush_l1d arch_capabilities
vmx flags : vnmi preemption_timer posted_intr invvpid ept_x_only ept_ad ept_1gb flexpriority apicv
tsc_offset vtptr mtf vpic ept vpid unrestricted_guest vpic_reg vid ple shadow_vmcs
ept_mode_based_exec tsc_scaling usr_wait_pause
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs
bogomips : 4224.00
clflush size : 64
cache_alignment : 64
address sizes : 46 bits physical, 48 bits virtual

power management:

=====

Display the last user who have been logged onto the system

MemTotal: 16065424 kB
MemFree: 12788356 kB
MemAvailable: 13628496 kB
Buffers: 51008 kB
Cached: 1467772 kB
SwapCached: 0 kB
Active: 533156 kB
Inactive: 1772424 kB
Active(anon): 3684 kB
Inactive(anon): 1246096 kB
Active(file): 529472 kB
Inactive(file): 526328 kB
Unevictable: 447528 kB
Mlocked: 0 kB
SwapTotal: 2097148 kB
SwapFree: 2097148 kB
Dirty: 52 kB
Writeback: 0 kB
AnonPages: 1234520 kB
Mapped: 383668 kB
Shmem: 469920 kB
KReclaimable: 84960 kB
Slab: 209016 kB
SReclaimable: 84960 kB
SUnreclaim: 124056 kB
KernelStack: 15240 kB
PageTables: 22396 kB
NFS_Unstable: 0 kB
Bounce: 0 kB
WritebackTmp: 0 kB
CommitLimit: 10129860 kB
Committed_AS: 5705748 kB
VmallocTotal: 34359738367 kB
VmallocUsed: 42900 kB
VmallocChunk: 0 kB
Percpu: 19008 kB
HardwareCorrupted: 0 kB
AnonHugePages: 0 kB
ShmemHugePages: 0 kB
ShmemPmdMapped: 0 kB
FileHugePages: 0 kB
FilePmdMapped: 0 kB
HugePages_Total: 0
HugePages_Free: 0

HugePages_Rsvd: 0
HugePages_Surp: 0
Hugepagesize: 2048 kB
Hugetlb: 0 kB
DirectMap4k: 285812 kB
DirectMap2M: 5687296 kB
DirectMap1G: 11534336 kB

=====

Display free and used memory

	total	used	free	shared	buff/cache	available
Mem:	15Gi	1.6Gi	12Gi	458Mi	1.5Gi	12Gi
Swap:	2.0Gi		0B	2.0Gi		

=====

Display PCI devicesr GB.)

-[0000:00]--00.0 Intel Corporation Device 4668
+02.0 Intel Corporation Device 4680
+04.0 Intel Corporation Device 461d
+14.0 Intel Corporation Device 7ae0
+14.2 Intel Corporation Device 7aa7
+14.3 Intel Corporation Device 7af0
+16.0 Intel Corporation Device 7ae8
+17.0 Intel Corporation Device 7ae2
+1a.0-[01]----00.0 Micron/Crucial Technology Device 540a
+1c.0-[02]----00.0 Realtek Semiconductor Co., Ltd. RTL8111/8168/8411 PCI Express Gigabit Ethernet Controller

Ethernet Controller

+1d.0-[03-04]----00.0-[04]--
+1f.0 Intel Corporation Device 7a86
+1f.3 Intel Corporation Device 7ad0
+1f.4 Intel Corporation Device 7aa3
+1f.5 Intel Corporation Device 7aa4

=====

Display USB devices

/: Bus 02.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/10p, 20000M
ID 1d6b:0003 Linux Foundation 3.0 root hub
/: Bus 01.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/16p, 480M
ID 1d6b:0002 Linux Foundation 2.0 root hub
└─ Port 7: Dev 2, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
ID 413c:2113 Dell Computer Corp.
└─ Port 7: Dev 2, If 1, Class=Human Interface Device, Driver=usbhid, 1.5M
ID 413c:2113 Dell Computer Corp.
└─ Port 8: Dev 3, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
ID 413c:301a Dell Computer Corp.
└─ Port 14: Dev 4, If 0, Class=Wireless, Driver=btusb, 12M
ID 8087:0026 Intel Corp.
└─ Port 14: Dev 4, If 1, Class=Wireless, Driver=btusb, 12M
ID 8087:0026 Intel Corp.

