```
Xshell 7 (Build 0141)
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Type `help' to learn how to use Xshell prompt.
[C:\~]$
Host 'ec2-13-236-207-27.ap-southeast-2.compute.amazonaws.com' resolved to 13.236.2
Connecting to 13.236.207.27:22...
Connection established.
To escape to local shell, press 'Ctrl+Alt+]'.
WARNING! The remote SSH server rejected X11 forwarding request.
        ####
                     Amazon Linux 2023
        #####\
         \###|
           \#/
                     https://aws.amazon.com/linux/amazon-linux-2023
        /m/'
Last login: Tue Dec 5 18:07:33 2023 from 171.88.111.180
[ec2-user@ip-172-31-19-79 ~]$ lscpu
Architecture:
                         x86_64
  CPU op-mode(s):
                         32-bit, 64-bit
  Address sizes:
                         46 bits physical, 48 bits virtual
  Byte Order:
                         Little Endian
CPU(s):
                         1
  On-line CPU(s) list:
Vendor ID:
                         GenuineIntel
  Model name:
                         Intel(R) Xeon(R) CPU E5-2686 v4 @ 2.30GHz
    CPU family:
                         79
    Model:
    Thread(s) per core:
                         1
                         1
    Core(s) per socket:
    Socket(s):
                         1
    Stepping:
    BogoMIPS:
    Flags:
                         fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca
                         cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx rd
                         tscp lm constant_tsc rep_good nopl xtopology cpuid tsc_kn
                         own_freq pni pclmulqdq ssse3 fma cx16 pcid sse4_1 sse4_2
                         x2apic movbe popent tsc deadline timer aes xsave avx f16c
                           rdrand hypervisor lahf_lm abm cpuid_fault invpcid_single
                          pti fsgsbase bmil avx2 smep bmi2 erms invpcid xsaveopt
Virtualization features:
  Hypervisor vendor:
                         Xen
  Virtualization type:
                         full
Caches (sum of all):
  L1d:
                         32 KiB (1 instance)
  11i:
                         32 KiB (1 instance)
  L2:
                         256 KiB (1 instance)
  L3:
                         45 MiB (1 instance)
NUMA:
  NUMA node(s):
                         1
  NUMA node0 CPU(s):
                         0
Vulnerabilities:
                         Not affected
  Gather data sampling:
  Itlb multihit:
                         KVM: Mitigation: VMX unsupported
  L1tf:
                         Mitigation; PTE Inversion
  Mds:
                         Vulnerable: Clear CPU buffers attempted, no microcode; SM
                         T Host state unknown
  Meltdown:
                         Mitigation; PTI
                         Vulnerable: Clear CPU buffers attempted, no microcode; SM
  Mmio stale data:
                         T Host state unknown
  Retbleed:
                         Not affected
  Spec rstack overflow:
```

Not affected

Vulnerable

Spec store bypass:

```
Mitigation; usercopy/swapgs barriers and user pointer s
  Spectre v1:
                          anitization
                          Mitigation; Retpolines, STIBP disabled, RSB filling, PBRS
  Spectre v2:
                          B-eIBRS Not affected
  Srbds:
                          Not affected
  Tsx async abort:
                         Not affected
[ec2-user@ip-172-31-19-79 ~]$ cd /
[ec2-user@ip-172-31-19-79 /]$ ls
      dev home lib64 media opt
                                      root sbin sys usr
bin
boot etc lib
                 local mnt
                                proc run
                                            srv
                                                   tmp var
[ec2-user@ip-172-31-19-79 /]$ cd bin/
[ec2-user@ip-172-31-19-79 bin]$ ls
                          journalctl
                                                sedismod
                                                sedispol
                          jp.py
acpi listen
                                                semodule_expand
                          jq
addr2line
                          jsondiff
                                                semodule_link
alias
                          jsondiff-3
                                                semodule_package
amazon-ssm-agent
                          jsondiff-3.9
                                                semodule unpackage
apropos
                          jsonpatch
                                                seq
apropos.man-db
                          jsonpatch-3
                                                sestatus
                          jsonpatch-3.9
                                                setarch
ar
                          jsonpointer
                                                setfacl
arch
                          jsonpointer-3
                                                setfattr
arpaname
arping
                          jsonpointer-3.9
                                                setfont
as
                          jsonschema
                                                setkeycodes
                          kbd_mode
at
                                                setleds
                          kbdinfo
atq
                                                setmetamode
atrm
                          kbdrate
                                                setpriv
 attr
                          kernel-install
                                                setsid
audit2allow
                          keyctl
                                                setterm
                          kill
audit2why
                                                setup-nsssysinit
aulast
                          killall
                                                setup-nsssysinit.sh
aulastlog
                          kmod
                                                setup-policy-routes
ausyscall
                          last
                                                setvtrgb
auvirt
                          lastb
                                                sftp
awk
                          lastcomm
                                                sg
                          lastlog
                                                sh
 aws
aws.cmd
                          lchfn
                                                sha1hmac
 aws bash completer
                          lchsh
                                                sha1sum
aws completer
                                                sha224hmac
                          1 d
                          ld.bfd
aws_zsh_completer.sh
                                                sha224sum
                          ld.so
                                                sha256hmac
h2sum
                          ldd
 base32
                                                sha256sum
base64
                          less
                                                sha384hmac
basename
                          lessecho
                                                sha384sum
                                                sha512hmac
basenc
                          lesskey
                          lesspipe.sh
                                                sha512sum
 hash
 bashbuq
                                                showconsolefont
                          lexgrog
bashbug-64
                          link
                                                showkey
                          linux-boot-prober
batch
                                                shred
hc
                          linux32
                                                shuf
                          linux64
                                                sim lsmplugin
bg
bootctl
                                                simc lsmplugin
                          ln
bunzip2
                          loadkeys
                                                size
                          loadunimap
busctl
                                                skill
                          locale
                                                slabtop
bzcat
bzcmp
                          localectl
                                                sleep
bzdiff
                          localedef
                                                sm3hmac
bzegrep
                          logger
                                                snice
bzfgrep
                          login
                                                soelim
                          loginctl
                                                soelim.groff
bzgrep
                          logname
bzip2
                                                sort
                          look
                                                sotruss
bzip2recover
 bzless
                          ls
                                                split
bzmore
                          lsattr
                                                sprof
                          lsblk
 c++filt
                                                ssh
                          lscpu
                                                ssh-add
 ca-legacy
                          lsinitrd
                                                ssh-agent
 cal
 captoinfo
                          lsipc
                                                ssh-copy-id
```

ssh-kevaen lsira catchseqv lslocks ssh-keyscan **lslogins** ssm-agent-worker catman lsmcli ssm-cli cdcentrino-decode 1 smd ssm-document-worker cfn-elect-cmd-leader ssm-session-logger lsmem cfn-get-metadata lsns ssm-session-worker cfn-hup sss ssh authorizedkeys lsof cfn-init make-dummy-cert sss ssh knownhostsproxy cfn-send-cmd-event man stap-merge cfn-send-cmd-result man-recode stap-report cfn-signal man.man-db stapbpf chacl mandb stapdyn manpath chage staprun chardetect mapscrn stapsh chattr mcookie stat chcat md5sum stdbuf chcon mesg strace checkmodule strace-log-merge miniterm-3.9.py miniterm-3.py checkpolicy strings chevron miniterm.py strip chgrp mkdir stty chmem mkfifo su chmod mknod sudo sudoedit choom mktemp chown mmdblookup sudoreplay modulemd-validator chronyc sum chrt more sync systemctl chvt mount mountpoint systemd-analyze cifsiostat systemd-ask-password cksum mpstat systemd-cat clear msgattrib clockdiff systemd-cgls msgcat cloud-id msgcmp systemd-cgtop cloud-init systemd-creds msgcomm cloud-init-per systemd-cryptenroll msgconv cmpmsgen systemd-delta col msqexec systemd-detect-virt colcrt msgfilter systemd-dissect systemd-escape colrm msqfmt systemd-firstboot column msggrep systemd-hwdb msginit COMM command systemd-id128 msqmerge coredumpctl msgunfmt systemd-inhibit systemd-machine-id-setup ср msguniq systemd-mount cpio mν systemd-notify cpupower namei systemd-path csh nano systemd-repart csplit negn curl systemd-resolve netstat systemd-run networkctl cut systemd-socket-activate cvtsudoers newgidmap cvrusbdb2current systemd-stdio-bridge newarp date newuidmap systemd-sysext dbus-broker systemd-sysusers ngettext dbus-broker-launch nice systemd-tmpfiles dc nisdomainname systemd-tty-ask-password-agent dd systemd-umount nl deallocvt tabs nm debuginfod-find nohup tac delv nproc tail df nroff tapestat diff nsenter tar diff3 nslookup taskset dig nsupdate tbl tcptraceroute dir numfmt dircolors objcopy tcsh dirname objdump tee

distro

od

test

tic dmesa oomctl dnf openssl time dnf-3 timedatectl openvt os-prober dnsdomainname timeout dnstap-read p11-kit tload domainname passwd toe dracut paste top du pathchk touch dumpkeys peekfd tput dwz perl tr ec2-metadata perl5.32.1 tracepath echo perldoc traceroute ed pgrep traceroute6 efisecdb pic troff piconv efivar true egrep pidof truncate eject pidstat trust elfedit pidwait tset encguess ping tsort pinky env tty envsubst pkg-config turbostat pkgconf eqn type pkill tzselect ex expand pldd uclampset udevadm expr pmap factor pod2man ul fallocate pod2text ulimit false pod2usage umask portablectl fc umount fg post-grohtml unalias fgconsole powernow-k8-decode uname fgrep pr uname26 file pre-grohtml unexpand fincore preconv unicode start find printenv unicode stop findmnt printf uniq fips-finish-install prlimit unlink fips-mode-setup prtstat unshare flock unxz fmt psfaddtable unzip psfgettable fold unzipsfx free psfstriptable unzstd funzip psfxtable update-ca-trust fuse2fs pslog update-crypto-policies gapplication pstree uptime pstree.x11 userdbctl gawk gdbus ptx users gencat bwa usleep gegn pwdx utmpdump getconf pwmake uuidgen uuidparse getent pwscore vdir getfacl pydoc pydoc3 getfattr νi getkeycodes pydoc3.9 view getopt python3 vim python3.9 vimdiff getopts gettext pzstd vimtutor gettext.sh quota vlock qio quotasync vmstat gio-querymodules-64 ranlib glib-compile-schemas wait read readelf wall gneqn gnroff readlink watch gpasswd realpath wc recode-sr-latin wdctl gpg gpg-error red wget whatis rename gpg2 gpgme-json renew-dummy-cert whatis.man-db gpgv2 renice whereis

```
apic
                          reset
                                                which
 gprof
                                                whiptail
                          resizecons
 grep
                          resolvectl
                                                who
                                                whoami
 groff
                          rev
 grops
                          rm
                                                write
 grotty
                          rmdir
                                                x86 64
                                                x86 64-amazon-linux-gnu-pkg-config
 groups
                          rnano
 growpart
                          rngtest
                                                x86_energy_perf_policy
 grub2-amazon-setup
                          rpcbind
 grub2-editenv
                                                xgettext
                          rpcinfo
 grub2-file
                          rpm
                                                xmlcatalog
 arub2-menulst2cfa
                          rpm2archive
                                                xmllint
 grub2-mkimage
                          rpm2cpio
                                                xmlwf
 grub2-mkpasswd-pbkdf2
                          rpmdb
                                                xxd
 grub2-mkrelpath
                          rpmkeys
                                                ΧZ
 grub2-mount
                          rpmquery
                                                xzcat
 grub2-script-check
                          rpmverify
                                                xzcmp
 gsettings
                          rst2html
                                                xzdec
                          rst2html4
                                                xzdiff
 gsoelim
 gtar
                          rst2html5
                                                xzegrep
                          rst2latex
 gtbl
                                                xzfgrep
 gtroff
                          rst2man
                                                xzgrep
                          rst2odt
 gunzip
                                                xzless
 gzexe
                          rst2odt_prepstyles
                                                xzmore
 gzip
                          rst2pseudoxml
                                                yes
 hardlink
                          rst2s5
                                                ypdomainname
 hash
                          rst2xetex
                                                yum
 head
                          rst2xml
                                                zcat
 hexdump
                          rstpep2html
                                                zcmp
 hibinit-agent
                          rsync
                                                zdiff
 homectl
                          rsync-ssl
                                                zdump
 host
                          run-parts
                                                zegrep
 hostid
                          runcon
                                                zfgrep
 hostname
                          rvi
                                                zforce
 hostnamectl
                          rview
                                                zgrep
 hunspell
                          rvim
                                                zip
 i386
                          sadf
                                                zipcloak
 iconv
                          sar
                                                zipgrep
 id
                          sbattach
                                                zipinfo
                          sbkeysync
 info
                                                zipnote
                          sbsiglist
 infocmp
                                                zipsplit
 infotocap
                                                zless
                          sbsign
 install
                          sbvarsign
                                                zmore
 ionice
                          sbverify
                                                znew
 iostat
                          scp
                                                zsoelim
 ipcmk
                          screen
                                                zstd
                                                zstdcat
 ipcrm
                          script
 ipcs
                          scriptlive
                                                zstdarep
 irqtop
                          scriptreplay
                                                zstdless
 isosize
                          sdiff
                                                zstdmt
 jobs
                          secon
 join
                          sed
[ec2-user@ip-172-31-19-79 bin]$ ls -l
total 161596
                               53640 Feb 17 2023 '['
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                               33488 Feb 1
                                              2023 ac
-rwxr-xr-x. 1 root root
                               16616 Jan 30
                                             2023
                                                    acpi_listen
                               29192 Oct 27 12:33
                                                    addr2line
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                                  33 Jan 28
                                             2023
                                                    alias
-rwxr-xr-x. 1 root root
                            14059560 Oct 11 16:53
                                                    amazon-ssm-agent
lrwxrwxrwx. 1 root root
                                  25 Nov 10 19:54
                                                    apropos -> /etc/alternatives/apr
opos
lrwxrwxrwx. 1 root root
                                   6 Feb 1 2023
                                                    apropos.man-db -> whatis
-rwxr-xr-x. 1 root root
                               58184 Oct 27 12:33
                               33016 Feb 17 2023
-rwxr-xr-x. 1 root root
                                                    arch
-rwxr-xr-x. 1 root root
                               16184 Sep 22 20:11
                                                    arpaname
                               36288 Nov 3 16:59
-rwxr-xr-x. 1 root root
                                                    arping
-rwxr-xr-x. 1 root root
                              716768 Oct 27 12:33
                                                    as
-rwsr-xr-x. 1 root root
                               58064 Jan 30
                                             2023
```

```
lrwxrwxrwx. 1 root root
                                   2 Jan 30
                                             2023
                                                   atq -> at
lrwxrwxrwx. 1 root root
                                   2 Jan 30
                                             2023
                                                   atrm -> at
-rwxr-xr-x. 1 root root
                               16200 Jan 29
                                             2023
                                                   attr
                              15197 Feb 1
                                             2023
-rwxr-xr-x. 1 root root
                                                   audit2allow
lrwxrwxrwx. 1 root root
                                  11 Feb
                                         1
                                             2023
                                                   audit2why -> audit2allow
-rwxr-xr-x. 1 root root
                              20464 Jan 29
                                             2023
                                                   aulast
                               16192 Jan 29
-rwxr-xr-x. 1 root root
                                             2023
                                                   aulastlog
-rwxr-xr-x. 1 root root
                               16192 Jan 29
                                             2023
                                                   ausyscall
-rwxr-xr-x. 1 root root
                              36944 Jan 29
                                             2023
                                                   auvirt
lrwxrwxrwx. 1 root root
                                   4 Aug 14 20:55
                                                   awk -> gawk
-rwxr-xr-x. 1 root root
                                819 Feb 15
                                            2023
                                                   aws
-rw-r--r-. 1 root root
                                1432 Feb 15
                                             2023 aws.cmd
-rw-r--r-. 1 root root
                                204 Feb 15
                                             2023 aws bash completer
                                             2023
-rwxr-xr-x. 1 root root
                                1230 Feb 15
                                                   aws completer
-rw-r--r-. 1 root root
                               1808 Feb 15
                                             2023
                                                   aws zsh completer.sh
                              53632 Feb 17
                                             2023
-rwxr-xr-x. 1 root root
                                                   b2sum
-rwxr-xr-x. 1 root root
                               37144 Feb 17
                                             2023
                                                   base32
                                             2023
-rwxr-xr-x. 1 root root
                               37136 Feb 17
                                                   base64
-rwxr-xr-x. 1 root root
                              37128 Feb 17
                                             2023
                                                   basename
-rwxr-xr-x. 1 root root
                              49760 Feb 17
                                             2023
                                                   basenc
-rwxr-xr-x. 1 root root
                            1440144 Jan 28
                                             2023
                                                   bash
lrwxrwxrwx. 1 root root
                                  10 Jan 28
                                             2023
                                                   bashbug -> bashbug-64
-rwxr-xr-x. 1 root root
                                7202 Jan 28
                                             2023
                                                   bashbug-64
-rwxr-xr-x. 1 root root
                                 140 Jan 30
                                             2023
                                                   batch
-rwxr-xr-x. 1 root root
                              91480 Jan 30
                                             2023
                                                  bc
                                  30 Jan 28
                                             2023
-rwxr-xr-x. 1 root root
                                                   bq
-rwxr-xr-x. 1 root root
                              99392 Sep 12 19:44
                                                   bootctl
lrwxrwxrwx. 1 root root
                                   5 Jan 29
                                             2023
                                                   bunzip2 -> bzip2
-rwxr-xr-x. 1 root root
                              107424 Sep 12 19:44
                                                   busctl
lrwxrwxrwx. 1 root root
                                   5 Jan 29
                                             2023
                                                   bzcat -> bzip2
lrwxrwxrwx. 1 root root
                                   6 Jan 29
                                                   bzcmp -> bzdiff
                                             2023
-rwxr-xr-x. 1 root root
                                2144 Jan 29
                                             2023 bzdiff
lrwxrwxrwx. 1 root root
                                   6 Jan 29
                                             2023 bzegrep -> bzgrep
lrwxrwxrwx. 1 root root
                                   6 Jan 29
                                             2023 bzfgrep -> bzgrep
                               2058 Jan 29
                                             2023 bzgrep
-rwxr-xr-x. 1 root root
                              41168 Jan 29
                                             2023
-rwxr-xr-x. 1 root root
                                                   bzip2
-rwxr-xr-x. 1 root root
                               16376 Jan 29
                                             2023
                                                   bzip2recover
lrwxrwxrwx. 1 root root
                                   6 Jan 29
                                             2023
                                                   bzless -> bzmore
-rwxr-xr-x. 1 root root
                                1263 Jan 29
                                             2023
                                                   bzmore
                              28616 Oct 27 12:33
-rwxr-xr-x. 1 root root
                                                   c++filt
-rwxr-xr-x. 1 root root
                               1648 Oct 13 16:38
                                                   ca-legacy
-rwxr-xr-x. 1 root root
                              53848 Jan 29
                                             2023
                                                   cal
lrwxrwxrwx. 1 root root
                                   3 Jun 8 20:20
                                                   captoinfo -> tic
-rwxr-xr-x. 1 root root
                              37104 Feb 17 2023
                                                   cat
-rwxr-xr-x. 1 root root
                               3289 Oct 23 22:53
                                                   catchsegv
-rwxr-xr-x. 1 root root
                              37512 Feb 1
                                             2023
                                                   catman
                                  30 Jan 28
                                             2023
-rwxr-xr-x. 1 root root
                                                   cd
-rwxr-xr-x. 1 root root
lrwxrwxrwx. 1 root root
                              14648 Nov 8 00:44
                                                   centrino-decode
                                  57 Feb 15
                                             2023
                                                   cfn-elect-cmd-leader -> ../../o
pt/aws/apitools/cfn-init/bin/cfn-elect-cmd-leader
lrwxrwxrwx. 1 root root
                                             2023 cfn-get-metadata -> ../..//opt/a
                                  53 Feb 15
ws/apitools/cfn-init/bin/cfn-get-metadata
lrwxrwxrwx. 1 root root
                                 44 Feb 15
                                            2023
                                                   cfn-hup -> ../..//opt/aws/apitoo
ls/cfn-init/bin/cfn-hup
lrwxrwxrwx. 1 root root
                                 45 Feb 15
                                             2023 cfn-init -> ../..//opt/aws/apito
ols/cfn-init/bin/cfn-init
lrwxrwxrwx. 1 root root
                                 55 Feb 15 2023 cfn-send-cmd-event -> ../..//opt
/aws/apitools/cfn-init/bin/cfn-send-cmd-event
                                 56 Feb 15 2023
                                                  cfn-send-cmd-result -> ../..//op
lrwxrwxrwx. 1 root root
t/aws/apitools/cfn-init/bin/cfn-send-cmd-result
                                 47 Feb 15
                                            2023 cfn-signal -> ../..//opt/aws/api
lrwxrwxrwx. 1 root root
tools/cfn-init/bin/cfn-signal
-rwxr-xr-x. 1 root root
                              20384 Jan 29
                                             2023
                                                   chacl
-rwsr-xr-x. 1 root root
                              74360 Feb 3
                                             2023
                                                   chage
-rwxr-xr-x. 1 root root
                                225 Feb
                                         2
                                             2023
                                                   chardetect
-rwxr-xr-x. 1 root root
                              16336 Jan 30
                                             2023
                                                   chattr
                              13855 Feb 1
                                             2023
-rwxr-xr-x. 1 root root
                                                   chcat
-rwxr-xr-x. 1 root root
                              62272 Feb 17
                                             2023
                                                   chcon
-rwxr-xr-x. 1 root root
                             467256 Jan 30
                                             2023
                                                   checkmodule
```

```
-rwxr-xr-x. 1 root root
                             533312 Jan 30
                                             2023
                                                   checkpolicy
-rwxr-xr-x. 1 root root
                                 961 Feb 2
                                             2023
                                                   chevron
-rwxr-xr-x. 1 root root
                               58104 Feb 17
                                             2023
                                                   chgrp
                              37032 Jan 29
                                             2023
-rwxr-xr-x. 1 root root
                                                   chmem
                              58104 Feb 17
-rwxr-xr-x. 1 root root
                                             2023
                                                   chmod
                              24640 Jan 29
                                             2023
                                                   choom
-rwxr-xr-x. 1 root root
                              62208 Feb 17
-rwxr-xr-x. 1 root root
                                             2023
                                                   chown
-rwxr-xr-x. 1 root root
                              99808 Jun
                                         5
                                             2023
                                                   chronvc
-rwxr-xr-x. 1 root root
                              28736 Jan 29
                                             2023
                                                   chrt
-rwxr-xr-x. 1 root root
                              16320 Jan 31
                                             2023
                                                   chvt
-rwxr-xr-x. 1 root root
                              24712 May 31
                                             2023
                                                  cifsiostat
-rwxr-xr-x. 1 root root
                              37032 Feb 17
                                             2023
                                                  cksum
-rwxr-xr-x. 1 root root
                              16304 Jun 8 20:21 clear
                              27968 Nov 3 16:59 clockdiff
-rwxr-xr-x. 1 root root
                                972 Oct 24 09:59 cloud-id
-rwxr-xr-x. 1 root root
                                976 Oct 24 09:59
                                                   cloud-init
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                               2112 Oct 24 09:59
                                                   cloud-init-per
-rwxr-xr-x. 1 root root
                              45472 Jan 29
                                             2023
                                                   cmp
-rwxr-xr-x. 1 root root
                              24576 Jan 29
                                             2023
                                                   col
-rwxr-xr-x. 1 root root
                              20440 Jan 29
                                             2023
                                                   colcrt
-rwxr-xr-x. 1 root root
                              16320 Jan 29
                                             2023
                                                   colrm
-rwxr-xr-x. 1 root root
                              36976 Jan 29
                                             2023
                                                   column
-rwxr-xr-x. 1 root root
                              37208 Feb 17
                                             2023
                                                   comm
-rwxr-xr-x. 1 root root
                                  35 Jan 28
                                            2023
                                                   command
                              74416 Sep 12 19:44
-rwxr-xr-x. 1 root root
                                                   coredumpctl
-rwxr-xr-x. 1 root root
                             149824 Feb 17
                                             2023
                                                   ср
-rwxr-xr-x. 1 root root
                             149120 Jan 29
                                             2023
                                                   cpio
                                         8 00:44
-rwxr-xr-x. 1 root root
                              76496 Nov
                                                   cpupower
lrwxrwxrwx. 1 root root
                                   4 Feb 14
                                             2023
                                                   csh -> tcsh
-rwxr-xr-x. 1 root root
                                             2023
                             112576 Feb 17
                                                   csplit
-rwxr-xr-x. 1 root root
                             223128 Oct
                                         6 21:58
                                                   curl
-rwxr-xr-x. 1 root root
                              49544 Feb 17
                                            2023
                                                   cut
                             315336 Sep 6 21:04
-rwxr-xr-x. 1 root root
                                                  cvtsudoers
-rwxr-xr-x. 1 root root
                            1694568 Jan 30
                                             2023
                                                  cyrusbdb2current
                             107136 Feb 17
                                             2023
-rwxr-xr-x. 1 root root
                                                  date
                                                   dbus-broker
                             241792 Jan 31
                                             2023
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                             133224 Jan 31
                                             2023
                                                   dbus-broker-launch
-rwxr-xr-x. 1 root root
                              49680 Jan 30
                                             2023
                                                   dc
-rwxr-xr-x. 1 root root
                              70360 Feb 17
                                             2023
                                                   dd
-rwxr-xr-x. 1 root root
                              16336 Jan 31
                                             2023
                                                   deallocvt
-rwxr-xr-x. 1 root root
                              20504 Jan 30
                                             2023
                                                   debuginfod-find
-rwxr-xr-x. 1 root root
                              47256 Sep 22 20:11
                                                   delv
                              87352 Feb 17
-rwxr-xr-x. 1 root root
                                             2023
                                                   df
-rwxr-xr-x. 1 root root
                             149576 Jan 29
                                             2023
                                                   diff
-rwxr-xr-x. 1 root root
                              57896 Jan 29
                                             2023
                                                   diff3
-rwxr-xr-x. 1 root root
                             145240 Sep 22 20:11
                                                   dig
                             142040 Feb 17
-rwxr-xr-x. 1 root root
                                             2023
                                                   dir
-rwxr-xr-x. 1 root root
                              41344 Feb 17
                                             2023
                                                   dircolors
-rwxr-xr-x. 1 root root
                              32840 Feb 17
                                             2023
                                                   dirname
-rwxr-xr-x. 1 root root
                                 953 Jan 29
                                             2023
                                                   distro
-rwxr-xr-x. 1 root root
                              74272 Jan 29
                                             2023
                                                   dmesg
lrwxrwxrwx. 1 root root
                                   5 Jan 31
                                             2023
                                                   dnf -> dnf-3
                               2092 Jan 31
-rwxr-xr-x. 1 root root
                                             2023
                                                  dnf-3
lrwxrwxrwx. 1 root root
                                             2023
                                   8 Jan 31
                                                  dnsdomainname -> hostname
-rwxr-xr-x. 1 root root
                              24536 Sep 22 20:11
                                                   dnstap-read
                                   8 Jan 31
                                            2023
lrwxrwxrwx. 1 root root
                                                   domainname -> hostname
-rwxr-xr-x. 1 root root
                              89162 Jul 6 20:21
                                                   dracut
                              162320 Feb 17
-rwxr-xr-x. 1 root root
                                             2023
                                                   du
                              168584 Jan 31
                                             2023
-rwxr-xr-x. 1 root root
                                                   dumpkeys
-rwxr-xr-x. 1 root root
                             222200 Jan 30
                                             2023
                                                   dwz
-rwxr-xr-x. 1 root root
                               9075 May
                                             2023
                                         9
                                                   ec2-metadata
-rwxr-xr-x. 1 root root
                              36920 Feb 17
                                             2023
                                                   echo
-rwxr-xr-x. 1 root root
                              53864 Jan 29
                                             2023
                                                   ed
-rwxr-xr-x. 1 root root
                             107848 Feb 10
                                             2023
                                                   efisecdb
-rwxr-xr-x. 1 root root
                              38256 Feb 10
                                             2023
                                                   efivar
                                  45 Jan 30
                                             2023
-rwxr-xr-x. 1 root root
                                                   egrep
                              45432 Jan 29
                                             2023
-rwxr-xr-x. 1 root root
                                                   eject
-rwxr-xr-x. 1 root root
                              37576 Oct 27 12:33
                                                   elfedit
-rwxr-xr-x. 1 root root
                               2980 Jan 29
                                            2023
                                                   encquess
```

```
-rwxr-xr-x. 1 root root
                              49960 Feb 17
                                            2023
                                                   env
                              37024 Jan 28
-rwxr-xr-x. 1 root root
                                            2023
                                                   envsubst
-rwxr-xr-x. 1 root root
                             194112 Jan 30
                                            2023
                                                   ean
                                 15 Nov 3 23:13
lrwxrwxrwx. 1 root root
                                                   ex -> /usr/libexec/vi
                              41288 Feb 17
-rwxr-xr-x. 1 root root
                                            2023
                                                   expand
-rwxr-xr-x. 1 root root
                             112312 Feb 17
                                             2023
                                                   expr
                              74368 Feb 17
-rwxr-xr-x. 1 root root
                                             2023
                                                   factor
-rwxr-xr-x. 1 root root
                              24536 Jan 29
                                             2023
                                                   fallocate
-rwxr-xr-x. 1 root root
                              32816 Feb 17
                                            2023
                                                  false
-rwxr-xr-x. 1 root root
                                 30 Jan 28
                                            2023
                                                   fc
-rwxr-xr-x. 1 root root
                                 30 Jan 28
                                            2023
                                                   fa
-rwxr-xr-x. 1 root root
                              16312 Jan 31
                                            2023
                                                  faconsole
-rwxr-xr-x. 1 root root
                                 45 Jan 30 2023
                                                 fgrep
                              29064 Aug 30 20:17
-rwxr-xr-x. 1 root root
                                                  file
                              24640 Jan 29 2023 fincore
-rwxr-xr-x. 1 root root
                             292856 Jan 30
                                            2023
-rwxr-xr-x. 1 root root
                                                  find
-rwxr-xr-x. 1 root root
                              67080 Jan 29
                                            2023
                                                   findmnt
-rwxr-xr-x. 1 root root
                               1212 Apr 28
                                             2022
                                                   fips-finish-install
                               5374 Apr 28
-rwxr-xr-x. 1 root root
                                            2022
                                                   fips-mode-setup
-rwxr-xr-x. 1 root root
                              24712 Jan 29
                                            2023
                                                  flock
-rwxr-xr-x. 1 root root
                              41312 Feb 17
                                            2023
                                                  fmt
-rwxr-xr-x. 1 root root
                              41248 Feb 17
                                            2023
                                                  fold
-rwxr-xr-x. 1 root root
                              24584 Feb 10
                                            2023
                                                  free
-rwxr-xr-x. 1 root root
                              32776 Jan 29
                                            2023
                                                  funzip
-rwxr-xr-x. 1 root root
                              75200 Jan 30 2023
                                                  fuse2fs
-rwxr-xr-x. 1 root root
                              24552 Sep 8 08:33
                                                   gapplication
-rwxr-xr-x. 1 root root
                                                   gawk
                             719088 Aug 14 20:55
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              53512 Sep 8 08:33
                                                   gdbus
                              29264 Oct 23 22:56
                                                   gencat
lrwxrwxrwx. 1 root root
                                  3 Jan 30 2023
                                                   geqn -> eqn
-rwxr-xr-x. 1 root root
                              36688 Oct 23 22:56
                                                   getconf
-rwxr-xr-x. 1 root root
                              37336 Oct 23 22:56
                                                  getent
                              33344 Jan 29 2023 getfacl
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              25040 Jan 29 2023 getfattr
                              16304 Jan 31 2023 getkeycodes
-rwxr-xr-x. 1 root root
                              24600 Jan 29 2023 getopt
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                                 35 Jan 28
                                            2023 getopts
-rwxr-xr-x. 1 root root
                              36992 Jan 28
                                             2023
                                                   gettext
-rwxr-xr-x. 1 root root
                               5191 Jan 28
                                            2023
                                                   gettext.sh
-rwxr-xr-x. 1 root root
                              98904 Sep 8 08:33
                                                   aio
-rwxr-xr-x. 1 root root
                              20304 Sep 8 08:33
                                                   gio-querymodules-64
-rwxr-xr-x. 1 root root
                              53488 Sep 8 08:33
                                                   glib-compile-schemas
                                  4 Jan 30
lrwxrwxrwx. 1 root root
                                           2023
                                                   qneqn -> neqn
lrwxrwxrwx. 1 root root
                                  5 Jan 30
                                           2023
                                                   gnroff -> nroff
-rwsr-xr-x. 1 root root
                              78680 Feb 3
                                            2023
                                                   gpasswd
                             938568 Jun
-rwxr-xr-x. 1 root root
                                        5
                                            2023
                                                   gpg
                              41176 Jan 29
                                             2023
-rwxr-xr-x. 1 root root
                                                   gpg-error
lrwxrwxrwx. 1 root root
-rwxr-xr-x. 1 root root
                                  3 Jun 5
                                             2023
                                                   gpg2 -> gpg
                              86744 Jan 31
                                             2023
                                                   gpgme-json
lrwxrwxrwx. 1 root root
                                  4
                                    Jun
                                         5
                                             2023
                                                   gpgv2 -> gpgv
lrwxrwxrwx. 1 root root
                                  3 Jan 30
                                            2023
                                                   gpic -> pic
-rwxr-xr-x. 1 root root
                             105112 Oct 27 12:33
                                                   gprof
-rwxr-xr-x. 1 root root
                             162576 Jan 30 2023
                                                  grep
                              99184 Jan 30
-rwxr-xr-x. 1 root root
                                           2023
                                                 groff
                             171360 Jan 30 2023 grops
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                             125224 Jan 30 2023 grotty
                                            2023 groups
-rwxr-xr-x. 1 root root
                              37120 Feb 17
                              22517 Jan 30 2023 growpart
-rwxr-xr-x. 1 root root
                               3714 Oct 23 10:57
                                                   grub2-amazon-setup
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                             474720 Oct 23 10:58
                                                   grub2-editenv
-rwxr-xr-x. 1 root root
                            1127808 Oct 23 10:58
                                                   grub2-file
-rwxr-xr-x. 1 root root
                             276000 Oct 23 10:58 grub2-menulst2cfg
-rwxr-xr-x. 1 root root
                             448816 Oct 23 10:58
                                                 grub2-mkimage
-rwxr-xr-x. 1 root root
                             301872 Oct 23 10:58
                                                  grub2-mkpasswd-pbkdf2
-rwxr-xr-x. 1 root root
                             288896 Oct 23 10:58
                                                 grub2-mkrelpath
                            1042328 Oct 23 10:58
-rwxr-xr-x. 1 root root
                                                 grub2-mount
                             322496 Oct 23 10:58
                                                 grub2-script-check
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              32944 Sep 8 08:33
                                                   gsettings
lrwxrwxrwx. 1 root root
                                  6 Jan 30
                                            2023
                                                   gsoelim -> soelim
```

```
lrwxrwxrwx. 1 root root
                                  3 Mar 24
                                            2023
                                                  gtar -> tar
                                                  qtbl -> tbl
lrwxrwxrwx. 1 root root
                                  3 Jan 30
                                            2023
lrwxrwxrwx. 1 root root
                                  5 Jan 30
                                            2023
                                                  gtroff -> troff
                               2350 Feb 8
                                            2023
-rwxr-xr-x. 1 root root
                                                  gunzip
                                         8
-rwxr-xr-x. 1 root root
                               6451 Feb
                                            2023
                                                  gzexe
                             100088 Feb
                                        8
                                            2023
-rwxr-xr-x. 1 root root
                                                  gzip
-rwxr-xr-x. 1 root root
                              37072 Jan 29
                                            2023
                                                   hardlink
-rwxr-xr-x. 1 root root
                                 32 Jan 28
                                            2023
                                                  hash
-rwxr-xr-x. 1 root root
                              45448 Feb 17
                                            2023
                                                  head
-rwxr-xr-x. 1 root root
                              53424 Jan 29
                                                  hexdump
                                            2023
-rwxr-xr-x. 1 root root
                              19144 Jan 31
                                            2023
                                                  hibinit-agent
-rwxr-xr-x. 1 root root
                             157184 Sep 12 19:44 homectl
-rwxr-xr-x. 1 root root
                             111944 Sep 22 20:11 host
-rwxr-xr-x. 1 root root
                              33024 Feb 17 2023 hostid
-rwxr-xr-x. 1 root root
                              24512 Jan 31 2023 hostname
                              33016 Sep 12 19:44 hostnamectl
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                             105232 Jan 31
                                            2023
                                                  hunspell
lrwxrwxrwx. 1 root root
                                  7 Jan 29
                                            2023
                                                  i386 -> setarch
-rwxr-xr-x. 1 root root
                              66760 Oct 23 22:56
                                                  iconv
-rwxr-xr-x. 1 root root
                              41256 Feb 17
                                            2023
                                                  id
-rwxr-xr-x. 1 root root
                             320376 Jan 30
                                            2023
                                                  info
-rwxr-xr-x. 1 root root
                              65984 Jun 8 20:21
                                                  infocmp
                                  3 Jun 8 20:20
lrwxrwxrwx. 1 root root
                                                  infotocap -> tic
-rwxr-xr-x. 1 root root
                             149864 Feb 17
                                            2023
                                                 install
-rwxr-xr-x. 1 root root
                              20464 Jan 29
                                            2023
                                                 ionice
                              57800 May 31
                                            2023
                                                  iostat
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              24648 Jan 29
                                            2023
                                                  ipcmk
-rwxr-xr-x. 1 root root
                              24576 Jan 29
                                            2023
                                                  ipcrm
-rwxr-xr-x. 1 root root
                              41064 Jan 29
                                            2023
                                                  ipcs
-rwxr-xr-x. 1 root root
                              36904 Jan 29
                                            2023
                                                  irqtop
-rwxr-xr-x. 1 root root
                              16224 Jan 29
                                            2023
                                                  isosize
-rwxr-xr-x. 1 root root
                                 32 Jan 28
                                            2023
                                                  jobs
                              53704 Feb 17
-rwxr-xr-x. 1 root root
                                            2023
                                                  join
-rwxr-xr-x. 1 root root
                              78480 Sep 12 19:44
                                                  journalctl
                               1698 Feb 16
-rwxr-xr-x. 1 root root
                                           2023
                                                  jp.py
                              32712 Jan 30
-rwxr-xr-x. 1 root root
                                            2023
lrwxrwxrwx. 1 root root
                                 14 Feb 2
                                            2023
                                                   jsondiff -> ./jsondiff-3.9
                                                   jsondiff-3 -> ./jsondiff-3.9
lrwxrwxrwx. 1 root root
                                 14 Feb
                                         2
                                            2023
-rwxr-xr-x. 1 root root
                               1021 Feb
                                         2
                                             2023
                                                   jsondiff-3.9
lrwxrwxrwx. 1 root root
                                            2023
                                                   jsonpatch -> ./jsonpatch-3.9
                                 15 Feb
                                         2
lrwxrwxrwx. 1 root root
                                                   jsonpatch-3 -> ./jsonpatch-3.9
                                 15 Feb
                                            2023
                                         2
-rwxr-xr-x. 1 root root
                               3664 Feb
                                            2023
                                         2
                                                   jsonpatch-3.9
                                         2
lrwxrwxrwx. 1 root root
                                 17 Feb
                                            2023
                                                   jsonpointer -> ./jsonpointer-3.9
lrwxrwxrwx. 1 root root
                                 17 Feb
                                         2
                                            2023
                                                   jsonpointer-3 -> ./jsonpointer-3
. 9
-rwxr-xr-x. 1 root root
                               1840 Feb
                                         2
                                            2023
                                                  jsonpointer-3.9
                                                   jsonschema
                                973 Feb
                                        2
                                            2023
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              16656 Jan 31
                                            2023
                                                   kbd mode
-rwxr-xr-x. 1 root root
                              20448 Jan 31
                                            2023
                                                   kbdinfo
-rwxr-xr-x. 1 root root
                              20448 Jan 31
                                            2023
                                                  kbdrate
                              13070 Sep 12 19:44
-rwxr-xr-x. 1 root root
                                                  kernel-install
-rwxr-xr-x. 1 root root
                              66336 Mar 6 2023
                                                  keyctl
-rwxr-xr-x. 1 root root
                              32816 Jan 29 2023
                                                  kill
                              33848 Feb 1 2023 killall
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                             166232 Jan 31
                                            2023
                                                  kmod
-rwxr-xr-x. 1 root root
                              36928 Jan 29
                                            2023
                                                  last
lrwxrwxrwx. 1 root root
                                  4 Jan 29
                                            2023
                                                  lastb -> last
                              33312 Feb
-rwxr-xr-x. 1 root root
                                         1
                                            2023
                                                  lastcomm
                              29984 Feb
                                            2023
                                                   lastlog
-rwxr-xr-x. 1 root root
                                         3
-rwxr-xr-x. 1 root root
                              24384 Feb
                                         1
                                            2023
                                                   lchfn
-rwxr-xr-x. 1 root root
                              24384 Feb 1
                                            2023
                                                  lchsh
lrwxrwxrwx. 1 root root
                                 20 Nov 10 19:54
                                                  ld -> /etc/alternatives/ld
-rwxr-xr-x. 1 root root
                            1203000 Oct 27 12:33
                                                  ld.bfd
lrwxrwxrwx. 1 root root
                                 32 Oct 23 22:53
                                                  ld.so -> ../../lib64/ld-linux-x8
6-64.so.2
-rwxr-xr-x. 1 root root
                               5446 Oct 23 22:53
                                                  ldd
                             212744 Mar 1 2023
-rwxr-xr-x. 1 root root
                                                  less
-rwxr-xr-x. 1 root root
                              16336 Mar
                                         1
                                            2023
                                                   lessecho
-rwxr-xr-x. 1 root root
                              25984 Mar
                                         1
                                            2023
                                                  lesskey
```

```
-rwxr-xr-x. 1 root root
                                3580 Mar
                                          1
                                             2023
                                                   lesspipe.sh
                               91080 Feb
                                             2023
-rwxr-xr-x. 1 root root
                                          1
                                                   lexaroa
-rwxr-xr-x. 1 root root
                               33024 Feb 17
                                             2023
                                                   link
-rwxr-xr-x. 1 root root
                                5997 Feb 1
                                             2023
                                                   linux-boot-prober
                                             2023
lrwxrwxrwx. 1 root root
                                   7 Jan 29
                                                   linux32 -> setarch
lrwxrwxrwx. 1 root root
                                   7 Jan 29
                                             2023
                                                   linux64 -> setarch
                               58096 Feb 17
                                             2023
-rwxr-xr-x. 1 root root
                                                    1 n
-rwxr-xr-x. 1 root root
                              205928 Jan 31
                                             2023
                                                    loadkeys
-rwxr-xr-x. 1 root root
                              32984 Jan 31
                                             2023
                                                   loadunimap
-rwxr-xr-x. 1 root root
                               61656 Oct 23 22:56
                                                   locale
-rwxr-xr-x. 1 root root
                              32968 Sep 12 19:44
                                                   localectl
                             322728 Oct 23 22:56
-rwxr-xr-x. 1 root root
                                                   localedef
-rwxr-xr-x. 1 root root
                               41712 Jan 29 2023
                                                  logger
                               45280 Jan 29 2023
-rwxr-xr-x. 1 root root
                                                  login
                               66248 Sep 12 19:44
-rwxr-xr-x. 1 root root
                                                   loginctl
-rwxr-xr-x. 1 root root
                               33024 Feb 17
                                             2023
                                                   logname
-rwxr-xr-x. 1 root root
                               20416 Jan 29
                                             2023
                                                   look
-rwxr-xr-x. 1 root root
                             142040 Feb 17
                                             2023
                                                    ls
-rwxr-xr-x. 1 root root
                              16336 Jan 30
                                             2023
                                                   lsattr
-rwxr-xr-x. 1 root root
                              128656 Jan 29
                                             2023
                                                   lsblk
-rwxr-xr-x. 1 root root
                             103416 Jan 29
                                             2023
                                                   lscpu
-rwxr-xr-x. 1 root root
                              11111 Jul 6 20:21
                                                   lsinitrd
-rwxr-xr-x. 1 root root
                               53520 Jan 29
                                             2023
                                                   lsipc
-rwxr-xr-x. 1 root root
                               24584 Jan 29
                                             2023
                                                   lsirq
-rwxr-xr-x. 1 root root
                               33136 Jan 29
                                             2023
                                                   lslocks
-rwxr-xr-x. 1 root root
                               53504 Jan 29
                                             2023
                                                   lslogins
-rwxr-xr-x. 1 root root
                                 941 Feb
                                          1
                                             2023
                                                   lsmcli
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                               33072 Feb
                                          1
                                             2023
                                                   lsmd
                               37168 Jan 29
                                             2023
                                                   lsmem
-rwxr-xr-x. 1 root root
                              41056 Jan 29
                                             2023
                                                   lsns
-rwxr-xr-x. 1 root root
                             179360 Jan 31
                                             2023
                                                   lsof
-rwxr-xr-x. 1 root root
                                 614 Oct 26 20:00
                                                   make-dummy-cert
                                  21 Nov 10 19:54
lrwxrwxrwx. 1 root root
                                                   man -> /etc/alternatives/man
-rwxr-xr-x. 1 root root
                               33560 Feb 1 2023
                                                   man-recode
                                         1 2023
                              123096 Feb
-rwxr-xr-x. 1 root root
                                                   man.man-db
-rwxr-xr-x. 1 root root
                              141056 Feb
                                             2023
                                                   mandb
                                         1
-rwxr-xr-x. 1 root root
                               33368 Feb
                                          1
                                             2023
                                                   manpath
-rwxr-xr-x. 1 root root
                               32920 Jan 31
                                             2023
                                                   mapscrn
-rwxr-xr-x. 1 root root
                               28752 Jan 29
                                             2023
                                                   mcookie
-rwxr-xr-x. 1 root root
                                             2023
                               41184 Feb 17
                                                   md5sum
-rwxr-xr-x. 1 root root
                               16216 Jan 29
                                             2023
                                                   mesa
lrwxrwxrwx. 1 root root
                                  22 Feb
                                          1
                                             2023
                                                   miniterm-3.9.py -> /usr/bin/mini
term-3.py
-rwxr-xr-x. 1 root root
                               35101 Feb
                                         1
                                             2023
                                                   miniterm-3.py
lrwxrwxrwx. 1 root root
                                  22 Feb
                                         1
                                             2023
                                                   miniterm.py -> /usr/bin/miniterm
-3.py
-rwxr-xr-x. 1 root root
                               70528 Feb 17
                                             2023
                                                   mkdir
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                               41376 Feb 17
                                             2023
                                                   mkfifo
                               45512 Feb 17
                                             2023
                                                   mknod
-rwxr-xr-x. 1 root root
                               41352 Feb 17
                                             2023
                                                   mktemp
-rwxr-xr-x. 1 root root
                               28984 Feb 1
                                             2023
                                                   mmdblookup
-rwxr-xr-x. 1 root root
                               29176 Feb
                                         1
                                                   modulemd-validator
                                             2023
                               45264 Jan 29
-rwxr-xr-x. 1 root root
                                             2023
                                                   more
                               49272 Jan 29
                                             2023
-rwsr-xr-x. 1 root root
                                                   mount
                               20424 Jan 29
                                             2023
-rwxr-xr-x. 1 root root
                                                   mountpoint
                               53640 May 31
                                             2023
-rwxr-xr-x. 1 root root
                                                   mpstat
-rwxr-xr-x. 1 root root
                               28608 Jan 28
                                             2023
                                                   msgattrib
                               28512 Jan 28
                                             2023
-rwxr-xr-x. 1 root root
                                                   msgcat
-rwxr-xr-x. 1 root root
                               28712 Jan 28
                                             2023
                                                   msqcmp
-rwxr-xr-x. 1 root root
                               28512 Jan 28
                                             2023
                                                   msgcomm
-rwxr-xr-x. 1 root root
                               24408 Jan 28
                                             2023
                                                   msqconv
-rwxr-xr-x. 1 root root
                               24408 Jan 28
                                             2023
                                                   msgen
-rwxr-xr-x. 1 root root
                               24416 Jan 28
                                             2023
                                                   msgexec
-rwxr-xr-x. 1 root root
                               36944 Jan 28
                                             2023
                                                   msgfilter
-rwxr-xr-x. 1 root root
                              86888 Jan 28
                                             2023
                                                   msgfmt
                             124592 Jan 28
                                             2023
-rwxr-xr-x. 1 root root
                                                   msggrep
                              69840 Jan 28
                                             2023
-rwxr-xr-x. 1 root root
                                                   msginit
-rwxr-xr-x. 1 root root
                              78072 Jan 28
                                             2023
                                                   msgmerge
-rwxr-xr-x. 1 root root
                               41056 Jan 28
                                             2023
                                                   msgunfmt
```

```
-rwxr-xr-x. 1 root root
                              28512 Jan 28
                                            2023
                                                  msquniq
                             141536 Feb 17
-rwxr-xr-x. 1 root root
                                            2023
                                                  mν
-rwxr-xr-x. 1 root root
                              24568 Jan 29
                                            2023
                                                  namei
                             355592 Feb 1
                                            2023
-rwxr-xr-x. 1 root root
                                                  nano
-rwxr-xr-x. 1 root root
                                916 Jan 30
                                            2023
                                                  nean
-rwxr-xr-x. 1 root root
                             161744 Feb
                                            2023
                                                  netstat
                                        1
                             120256 Sep 12 19:44
-rwxr-xr-x. 1 root root
                                                  networkctl
-rwxr-xr-x. 1 root root
                              43616 Feb
                                         3
                                            2023
                                                  newgidmap
-rwsr-xr-x. 1 root root
                              42392 Feb
                                         3
                                            2023
                                                  newgrp
-rwxr-xr-x. 1 root root
                              39504 Feb
                                            2023
                                         3
                                                  newuidmap
-rwxr-xr-x. 1 root root
                              36984 Jan 28
                                            2023
                                                  ngettext
                              37120 Feb 17
-rwxr-xr-x. 1 root root
                                            2023
                                                  nice
lrwxrwxrwx. 1 root root
                                  8 Jan 31
                                            2023
                                                  nisdomainname -> hostname
                             107792 Feb 17
                                            2023
-rwxr-xr-x. 1 root root
                                                  nl
                              50896 Oct 27 12:33
-rwxr-xr-x. 1 root root
                                                  nm
-rwxr-xr-x. 1 root root
                              37040 Feb 17
                                            2023
                                                  nohup
-rwxr-xr-x. 1 root root
                              37144 Feb 17
                                            2023
                                                  nproc
-rwxr-xr-x. 1 root root
                               3285 Jan 30
                                            2023
                                                  nroff
                              28912 Jan 29
-rwxr-xr-x. 1 root root
                                            2023
                                                  nsenter
-rwxr-xr-x. 1 root root
                             120104 Sep 22 20:11
                                                  nslookup
-rwxr-xr-x. 1 root root
                             82496 Sep 22 20:11 nsupdate
-rwxr-xr-x. 1 root root
                              57768 Feb 17
                                           2023
                                                  numfmt
-rwxr-xr-x. 1 root root
                             195304 Oct 27 12:33
                                                  objcopy
-rwxr-xr-x. 1 root root
                             461632 Oct 27 12:33
                                                  objdump
                              66200 Feb 17 2023
-rwxr-xr-x. 1 root root
                                                  od
-rwxr-xr-x. 1 root root
                              20528 Sep 12 19:44
                                                  oomctl
-rwxr-xr-x. 1 root root
                            1000360 Oct 26 20:00
                                                  openssl
-rwxr-xr-x. 1 root root
                              24904 Jan 31
                                            2023
                                                  openvt
-rwxr-xr-x. 1 root root
                               5919 Feb
                                         1
                                            2023
                                                  os-prober
-rwxr-xr-x. 1 root root
                              32888 Sep 11 08:05
                                                  p11-kit
-rwsr-xr-x. 1 root root
                              32776 Feb
                                        1
                                            2023
                                                  passwd
-rwxr-xr-x. 1 root root
                              37032 Feb 17
                                            2023
                                                  paste
                              37112 Feb 17
-rwxr-xr-x. 1 root root
                                            2023
                                                 pathchk
-rwxr-xr-x. 1 root root
                              16296 Feb 1 2023
                                                 peekfd
                              16000 Jun 14 21:06
-rwxr-xr-x. 2 root root
                                                 perl
                              16000 Jun 14 21:06 perl5.32.1
-rwxr-xr-x. 2 root root
-rwxr-xr-x. 1 root root
                                118 Jun 14 23:48
                                                  perldoc
-rwxr-xr-x. 1 root root
                              32848 Feb 10
                                            2023
                                                  pgrep
                             202544 Jan 30
-rwxr-xr-x. 1 root root
                                            2023
                                                  pic
                              8271 Jan 29
-rwxr-xr-x. 1 root root
                                            2023
                                                  piconv
-rwxr-xr-x. 1 root root
                              24552 Feb 10
                                            2023
                                                  pidof
                              53616 May 31
-rwxr-xr-x. 1 root root
                                                  pidstat
                                            2023
                              32848 Feb 10
-rwxr-xr-x. 1 root root
                                            2023
                                                  pidwait
-rwxr-xr-x. 1 root root
                              95272 Nov 3 16:59
                                                  ping
-rwxr-xr-x. 1 root root
                              37056 Feb 17
                                            2023
                                                  pinky
-rwxr-xr-x. 1 root root
                                335 Apr 11
                                            2023
                                                  pkg-config
                              47216 Apr 11
-rwxr-xr-x. 1 root root
                                            2023
                                                  pkgconf
                                                  pkill
-rwxr-xr-x. 1 root root
                              32848 Feb 10
                                            2023
-rwxr-xr-x. 1 root root
                              25096 Oct 23 22:56
                                                  pldd
-rwxr-xr-x. 1 root root
                              36920 Feb 10
                                            2023
                                                  pmap
-rwxr-xr-x. 1 root root
                              15034 Jan 29
                                            2023
                                                  pod2man
-rwxr-xr-x. 1 root root
                             10803 Jan 29
                                            2023 pod2text
                               4107 Jan 29
-rwxr-xr-x. 1 root root
                                            2023 pod2usage
                              62104 Sep 12 19:44 portablectl
-rwxr-xr-x. 1 root root
                             208760 Jan 30 2023 post-grohtml
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              14664 Nov 8 00:44
                                                  powernow-k8-decode
-rwxr-xr-x. 1 root root
                              74600 Feb 17
                                            2023
                                                  pr
                              95248 Jan 30
                                            2023
-rwxr-xr-x. 1 root root
                                                  pre-grohtml
                              57728 Jan 30
                                            2023
-rwxr-xr-x. 1 root root
                                                  preconv
-rwxr-xr-x. 1 root root
                              32832 Feb 17
                                            2023
                                                  printenv
-rwxr-xr-x. 1 root root
                              53608 Feb 17
                                            2023
                                                  printf
-rwxr-xr-x. 1 root root
                              29208 Jan 29
                                            2023
                                                  prlimit
-rwxr-xr-x. 1 root root
                              24520 Feb 1
                                            2023
                                                  prtstat
-rwxr-xr-x. 1 root root
                             145208 Feb 10
                                            2023
                                                  ps
lrwxrwxrwx. 1 root root
                                  9 Jan 31
                                            2023
                                                 psfaddtable -> psfxtable
                                  9 Jan 31
                                            2023
                                                 psfgettable -> psfxtable
lrwxrwxrwx. 1 root root
                                  9 Jan 31
                                            2023
                                                  psfstriptable -> psfxtable
lrwxrwxrwx. 1 root root
-rwxr-xr-x. 1 root root
                              32784 Jan 31
                                            2023
                                                  psfxtable
-rwxr-xr-x. 1 root root
                              16184 Feb
                                        1
                                            2023
                                                  pslog
```

```
-rwxr-xr-x. 1 root root
                              37888 Feb 1
                                            2023
                                                   pstree
lrwxrwxrwx. 1 root root
                                  6 Feb
                                         1
                                            2023
                                                  pstree.x11 -> pstree
-rwxr-xr-x. 1 root root
                             133232 Feb 17
                                             2023
                                                  ptx
                              37152 Feb 17
                                            2023
-rwxr-xr-x. 1 root root
                                                  pwd
                              16320 Feb 10
-rwxr-xr-x. 1 root root
                                            2023
                                                   pwdx
-rwxr-xr-x. 1 root root
                              16200 Jan 30
                                            2023
                                                  pwmake
                              16184 Jan 30
-rwxr-xr-x. 1 root root
                                            2023
                                                   pwscore
lrwxrwxrwx. 1 root root
                                  8 Sep 8 09:47
                                                   pydoc -> ./pydoc3
lrwxrwxrwx. 1 root root
                                  8 Sep 8 09:47
                                                   pydoc3 -> pydoc3.9
-rwxr-xr-x. 1 root root
                                 78 Sep 8 09:47
                                                   pydoc3.9
lrwxrwxrwx. 1 root root
                                  9 Sep 8 09:47
                                                   python3 -> python3.9
-rwxr-xr-x. 1 root root
                              16168 Sep 8 09:47 pvthon3.9
                             711488 Oct 26 08:12 pzstd
-rwxr-xr-x. 1 root root
                              84200 Feb 2 2023 quota
-rwxr-xr-x. 1 root root
                              67000 Feb 2 2023 quotasync
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              58192 Oct 27 12:33
                                                  ranlib
-rwxr-xr-x. 1 root root
                                 32 Jan 28
                                           2023
                                                  read
-rwxr-xr-x. 1 root root
                             832824 Oct 27 12:33
                                                   readelf
-rwxr-xr-x. 1 root root
                              41232 Feb 17
                                            2023
                                                   readlink
-rwxr-xr-x. 1 root root
                              41320 Feb 17
                                           2023
                                                   realpath
-rwxr-xr-x. 1 root root
                              16208 Jan 28
                                            2023
                                                   recode-sr-latin
-rwxr-xr-x. 1 root root
                                 92 Jan 29
                                            2023
                                                  red
-rwxr-xr-x. 1 root root
                              24568 Jan 29
                                           2023
                                                  rename
-rwxr-xr-x. 1 root root
                                729 Oct 26 20:00
                                                  renew-dummy-cert
-rwxr-xr-x. 1 root root
                              16312 Jan 29 2023
                                                  renice
lrwxrwxrwx. 1 root root
                                  4 Jun 8 20:20
                                                  reset -> tset
-rwxr-xr-x. 1 root root
                              28808 Jan 31 2023
                                                  resizecons
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                             162072 Sep 12 19:44
                                                   resolvectl
                              16304 Jan 29
                                            2023
                                                   rev
-rwxr-xr-x. 1 root root
                              62248 Feb 17
                                             2023
                                                   rm
-rwxr-xr-x. 1 root root
                              45264 Feb 17
                                            2023
                                                  rmdir
lrwxrwxrwx. 1 root root
                                  4 Feb 1
                                            2023
                                                  rnano -> nano
                              21256 Feb 2 2023
-rwxr-xr-x. 1 root root
                                                  rngtest
-rwxr-xr-x. 1 root root
                              66072 Feb 2 2023
                                                  rpcbind
                              37096 Feb 2 2023
-rwxr-xr-x. 1 root root
                                                   rpcinfo
                              24904 Apr 17
                                            2023
-rwxr-xr-x. 1 root root
                                                   rpm
-rwxr-xr-x. 1 root root
                              24384 Apr 17
                                            2023
                                                   rpm2archive
-rwxr-xr-x. 1 root root
                              16184 Apr 17
                                             2023
                                                   rpm2cpio
-rwxr-xr-x. 1 root root
                              20912 Apr 17
                                             2023
                                                   rpmdb
-rwxr-xr-x. 1 root root
                              16664 Apr 17
                                             2023
                                                   rpmkeys
lrwxrwxrwx. 1 root root
                                  3 Apr 17
                                                   rpmquery -> rpm
                                            2023
lrwxrwxrwx. 1 root root
                                  3 Apr 17
                                            2023
                                                   rpmverify -> rpm
                                597 Jan 29
-rwxr-xr-x. 1 root root
                                            2023
                                                  rst2html
-rwxr-xr-x. 1 root root
                                717 Jan 29
                                            2023
                                                  rst2html4
-rwxr-xr-x. 1 root root
                               1140 Jan 29
                                            2023
                                                 rst2html5
                                794 Jan 29
                                            2023
                                                  rst2latex
-rwxr-xr-x. 1 root root
                                602 Jan 29
                                             2023
-rwxr-xr-x. 1 root root
                                                  rst2man
-rwxr-xr-x. 1 root root
                                767 Jan 29
                                             2023
                                                  rst2odt
                                                   rst2odt_prepstyles
-rwxr-xr-x. 1 root root
                               1729 Jan 29
                                             2023
-rwxr-xr-x. 1 root root
                                604 Jan 29
                                             2023
                                                  rst2pseudoxml
                                640 Jan 29
-rwxr-xr-x. 1 root root
                                            2023
                                                  rst2s5
-rwxr-xr-x. 1 root root
                                874 Jan 29
                                            2023 rst2xetex
                                605 Jan 29
-rwxr-xr-x. 1 root root
                                            2023 rst2xml
                                673 Jan 29
                                            2023 rstpep2html
-rwxr-xr-x. 1 root root
                             562816 Feb 2
-rwxr-xr-x. 1 root root
                                            2023 rsync
-rwxr-xr-x. 1 root root
                               5132 Sep 26
                                           2021 rsync-ssl
-rwxr-xr-x. 1 root root
                               1987 Jan 30
                                            2023 run-parts
                              37112 Feb 17
                                            2023
-rwxr-xr-x. 1 root root
                                                  runcon
lrwxrwxrwx. 1 root root lrwxrwxrwx. 1 root root
                                 15 Nov
                                         3 23:13
                                                  rvi -> /usr/libexec/vi
                                         3 23:13
                                                   rview -> /usr/libexec/vi
                                 15 Nov
lrwxrwxrwx. 1 root root
                                                  rvim -> vim
                                  3 Nov
                                         3 23:13
-rwxr-xr-x. 1 root root
                             413392 May 31 2023
                                                  sadf
-rwxr-xr-x. 1 root root
                             140232 May 31
                                            2023
                                                  sar
-rwxr-xr-x. 1 root root
                              29032 Feb 2
                                            2023
                                                  sbattach
-rwxr-xr-x. 1 root root
                              37624 Feb 2
                                            2023 sbkeysync
                              16728 Feb 2 2023 sbsiglist
-rwxr-xr-x. 1 root root
                              41584 Feb
                                         2
                                            2023
-rwxr-xr-x. 1 root root
                                                  sbsign
-rwxr-xr-x. 1 root root
                              25016 Feb
                                         2
                                             2023
                                                   sbvarsign
-rwxr-xr-x. 1 root root
                              37184 Feb
                                         2
                                            2023
                                                   sbverify
```

```
-rwxr-xr-x. 1 root root
                             137400 Sep 6 18:43
                                                  SCD
                             504160 Jun 8 20:46
-rwxr-sr-x. 1 root screen
                                                  screen
-rwxr-xr-x. 1 root root
                              53584 Jan 29
                                            2023
                                                  script
                              45304 Jan 29
                                            2023 scriptlive
-rwxr-xr-x. 1 root root
                              36928 Jan 29
-rwxr-xr-x. 1 root root
                                            2023
                                                  scriptreplay
                              49640 Jan 29
                                            2023
-rwxr-xr-x. 1 root root
                                                  sdiff
                              29728 Feb
-rwxr-xr-x. 1 root root
                                         1
                                            2023
                                                  secon
-rwxr-xr-x. 1 root root
                             116840 Jan 30
                                            2023
                                                  sed
-rwxr-xr-x. 1 root root
                             297384 Jan 30
                                            2023
                                                  sedismod
-rwxr-xr-x. 1 root root
                             218408 Jan 30
                                            2023
                                                  sedispol
-rwxr-xr-x. 1 root root
                              16224 Feb
                                        1
                                            2023
                                                  semodule expand
-rwxr-xr-x. 1 root root
                              16224 Feb
                                         1
                                            2023
                                                  semodule link
-rwxr-xr-x. 1 root root
                              16624 Feb
                                        1
                                            2023
                                                  semodule package
                                            2023
-rwxr-xr-x. 1 root root
                              16216 Feb
                                        1
                                                  semodule unpackage
                                            2023
                              49528 Feb 17
-rwxr-xr-x. 1 root root
                                                  seq
                              24424 Feb
                                            2023
-rwxr-xr-x. 1 root root
                                        1
                                                  sestatus
-rwxr-xr-x. 1 root root
                              28920 Jan 29
                                            2023
                                                  setarch
-rwxr-xr-x. 1 root root
                              41720 Jan 29
                                            2023
                                                  setfacl
-rwxr-xr-x. 1 root root
                              20744 Jan 29
                                            2023
                                                  setfattr
-rwxr-xr-x. 1 root root
                              53640 Jan 31
                                            2023
                                                  setfont
-rwxr-xr-x. 1 root root
                              16352 Jan 31
                                            2023
                                                  setkeycodes
-rwxr-xr-x. 1 root root
                              20520 Jan 31
                                            2023
                                                  setleds
-rwxr-xr-x. 1 root root
                              16456 Jan 31
                                            2023
                                                  setmetamode
-rwxr-xr-x. 1 root root
                              41072 Jan 29
                                            2023
                                                  setpriv
-rwxr-xr-x. 1 root root
                              16216 Jan 29
                                            2023
                                                 setsid
                              36968 Jan 29
                                            2023
-rwxr-xr-x. 1 root root
                                                  setterm
lrwxrwxrwx. 1 root root
                                 19 Aug 17 16:28
                                                  setup-nsssysinit -> setup-nsssys
init.sh
-rwxr-xr-x. 1 root root
                               1543 Aug 17 16:28
                                                  setup-nsssysinit.sh
-rwxr-xr-x. 1 root root
                               2168 Oct 24 18:29
                                                  setup-policy-routes
-rwxr-xr-x. 1 root root
                              16408 Jan 31
                                                  setvtrgb
                                            2023
-rwxr-xr-x. 1 root root
                             149672 Sep 6 18:43
                                                  sftp
                                  6 Feb
lrwxrwxrwx. 1 root root
                                           2023 sg -> newgrp
lrwxrwxrwx. 1 root root
                                  4 Jan 28
                                            2023 sh -> bash
                              36896 Feb 1
                                            2023 shalhmac
-rwxr-xr-x. 6 root root
                              41192 Feb 17
                                            2023
                                                  sha1sum
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 6 root root
                              36896 Feb
                                            2023
                                                  sha224hmac
                                        - 1
-rwxr-xr-x. 1 root root
                              41184 Feb 17
                                            2023
                                                  sha224sum
-rwxr-xr-x. 6 root root
                              36896 Feb
                                            2023
                                                  sha256hmac
-rwxr-xr-x. 1 root root
                              41184 Feb 17
                                            2023
                                                  sha256sum
-rwxr-xr-x. 6 root root
                              36896 Feb
                                            2023
                                                  sha384hmac
                                         1
                              41184 Feb 17
-rwxr-xr-x. 1 root root
                                            2023
                                                  sha384sum
-rwxr-xr-x. 6 root root
                              36896 Feb
                                            2023
                                                  sha512hmac
-rwxr-xr-x. 1 root root
                              41184 Feb 17
                                            2023
                                                  sha512sum
-rwxr-xr-x. 1 root root
                              20528 Jan 31
                                            2023
                                                  showconsolefont
-rwxr-xr-x. 1 root root
                              20472 Jan 31
                                            2023
                                                  showkey
                              53712 Feb 17
                                            2023
-rwxr-xr-x. 1 root root
                                                  shred
-rwxr-xr-x. 1 root root
                              49736 Feb 17
                                            2023
                                                  shuf
-rwxr-xr-x. 1 root root
                               1233 Feb
                                            2023
                                                  sim lsmplugin
                             125000 Feb
-rwxr-xr-x. 1 root root
                                         1
                                            2023
                                                  simc_lsmplugin
-rwxr-xr-x. 1 root root
                              33144 Oct 27 12:33
                                                  size
-rwxr-xr-x. 1 root root
                              32824 Feb 10
                                           2023
                                                  skill
-rwxr-xr-x. 1 root root
                              24672 Feb 10
                                            2023
                                                  slabtop
                              37112 Feb 17
                                            2023
-rwxr-xr-x. 1 root root
                                                  sleep
-rwxr-xr-x. 6 root root
                              36896 Feb 1
                                            2023
                                                  sm3hmac
-rwxr-xr-x. 1 root root
                              32824 Feb 10
                                           2023
                                                  snice
lrwxrwxrwx. 1 root root
                                 24 Nov 10 19:54
                                                  soelim -> /etc/alternatives/soel
im
                              37168 Jan 30
                                            2023
-rwxr-xr-x. 1 root root
                                                  soelim.groff
-rwxr-xr-x. 1 root root
                             116912 Feb 17
                                            2023
                                                   sort
-rwxr-xr-x. 1 root root
                               4282 Oct 23 22:53
                                                  sotruss
-rwxr-xr-x. 1 root root
                              54144 Feb 17
                                            2023
                                                  split
-rwxr-xr-x. 1 root root
                              36912 Oct 23 22:56
                                                  sprof
-rwxr-xr-x. 1 root root
                             864880 Sep 6 18:43
                                                  ssh
-rwxr-xr-x. 1 root root
                             169920 Sep 6 18:43
                                                  ssh-add
                             288848 Sep 6 18:43
-rwxr-xr-x. 1 root root
                                                 ssh-agent
-rwxr-xr-x. 1 root root
                             12680 Sep
                                        6 18:42
                                                  ssh-copy-id
-rwxr-xr-x. 1 root root
                             467008 Sep
                                         6 18:43
                                                  ssh-keygen
-rwxr-xr-x. 1 root root
                             203240 Sep
                                         6 18:43
                                                  ssh-keyscan
```

```
-rwxr-xr-x. 1 root root
                           23398464 Oct 11 16:53
                                                  ssm-agent-worker
-rwxr-xr-x. 1 root root
                           19315376 Oct 11 16:53
                                                  ssm-cli
-rwxr-xr-x. 1 root root
                           21735816 Oct 11 16:53
                                                  ssm-document-worker
-rwxr-xr-x. 1 root root
                           9684832 Oct 11 16:53 ssm-session-logger
                           17282176 Oct 11 16:53 ssm-session-worker
-rwxr-xr-x. 1 root root
                              24624 Feb 14
                                           2023
                                                 sss_ssh_authorizedkeys
-rwxr-xr-x. 1 root root
                                                  sss_ssh_knownhostsproxy
                              28720 Feb 14
-rwxr-xr-x. 1 root root
                                            2023
-rwxr-xr-x. 1 root root
                              16192 Feb 16
                                            2023
                                                  stap-merge
-rwxr-xr-x. 1 root root
                                           2023
                               4919 Feb 16
                                                  stap-report
-rwxr-xr-x. 1 root root
                             192888 Feb 16
                                           2023
                                                  stapbpf
                                           2023
-rwxr-xr-x. 1 root root
                             134856 Feb 16
                                                 stapdyn
                            120568 Feb 16
---s--x---. 1 root stapusr
                                           2023 staprun
-rwxr-xr-x. 1 root root
                              32872 Feb 16
                                           2023 stapsh
-rwxr-xr-x. 1 root root
                              86656 Feb 17
                                           2023 stat
                              49480 Feb 17
                                            2023 stdbuf
-rwxr-xr-x. 1 root root
                            2001008 Feb 2
                                            2023 strace
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              1825 Feb 16
                                           2021 strace-log-merge
-rwxr-xr-x. 1 root root
                              33272 Oct 27 12:33
                                                  strings
-rwxr-xr-x. 1 root root
                             195288 Oct 27 12:33
                                                  strip
-rwxr-xr-x. 1 root root
                              78232 Feb 17
                                           2023
                                                  stty
                              57728 Jan 29
-rwsr-xr-x. 1 root root
                                           2023
                                                  SU
---s--x--x. 1 root root
                             202328 Sep 6 21:04
                                                  sudo
lrwxrwxrwx. 1 root root
                                  4 Sep 6 21:04
                                                  sudoedit -> sudo
---x--x. 1 root root
                              91472 Sep 6 21:04
                                                  sudoreplay
-rwxr-xr-x. 1 root root
                              37032 Feb 17 2023
                                                  sum
                              36984 Feb 17
                                           2023
-rwxr-xr-x. 1 root root
                                                  sync
-rwxr-xr-x. 1 root root
                                                  systemctl
                             302536 Sep 12 19:44
-rwxr-xr-x. 1 root root
                             207064 Sep 12 19:44
                                                  systemd-analyze
-rwxr-xr-x. 1 root root
                              20600 Sep 12 19:44
                                                  systemd-ask-password
-rwxr-xr-x. 1 root root
                              20424 Sep 12 19:44
                                                  systemd-cat
-rwxr-xr-x. 1 root root
                              24776 Sep 12 19:44
                                                  systemd-cgls
-rwxr-xr-x. 1 root root
                              41120 Sep 12 19:44
                                                  systemd-cgtop
                              45600 Sep 12 19:44 systemd-creds
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              66192 Sep 12 19:44 systemd-cryptenroll
                              28744 Sep 12 19:44 systemd-delta
-rwxr-xr-x. 1 root root
                              20416 Sep 12 19:44 systemd-detect-virt
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              49680 Sep 12 19:44 systemd-dissect
                              24512 Sep 12 19:44
-rwxr-xr-x. 1 root root
                                                  systemd-escape
-rwxr-xr-x. 1 root root
                              58096 Sep 12 19:44
                                                  systemd-firstboot
-rwxr-xr-x. 1 root root
                              20512 Sep 12 19:44
                                                  systemd-hwdb
-rwxr-xr-x. 1 root root
                              28808 Sep 12 19:44
                                                  systemd-id128
-rwxr-xr-x. 1 root root
                              24560 Sep 12 19:44
                                                  systemd-inhibit
                              20744 Sep 12 19:44
                                                  systemd-machine-id-setup
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                              62136 Sep 12 19:44
                                                  systemd-mount
-rwxr-xr-x. 1 root root
                              24648 Sep 12 19:44
                                                  systemd-notify
                              20408 Sep 12 19:44
-rwxr-xr-x. 1 root root
                                                  systemd-path
-rwxr-xr-x. 1 root root
                             174320 Sep 12 19:44
                                                  systemd-repart
                                 10 Sep 12 19:44
                                                  systemd-resolve -> resolvectl
lrwxrwxrwx. 1 root root
-rwxr-xr-x. 1 root root
                              66216 Sep 12 19:44
                                                  systemd-run
-rwxr-xr-x. 1 root root
                              28776 Sep 12 19:44
                                                  systemd-socket-activate
-rwxr-xr-x. 1 root root
                              24520 Sep 12 19:44
                                                  systemd-stdio-bridge
-rwxr-xr-x. 1 root root
                              49640 Sep 12 19:44
                                                  systemd-sysext
                              74640 Sep 12 19:44
-rwxr-xr-x. 1 root root
                                                  systemd-sysusers
                             124088 Sep 12 19:44
-rwxr-xr-x. 1 root root
                                                 systemd-tmpfiles
-rwxr-xr-x. 1 root root
                              37000 Sep 12 19:44
                                                  systemd-tty-ask-password-agent
lrwxrwxrwx. 1 root root
                                 13 Sep 12 19:44 systemd-umount -> systemd-mount
-rwxr-xr-x. 1 root root
                              20416 Jun 8 20:21
                                                  tabs
                             108208 Feb 17
-rwxr-xr-x. 1 root root
                                            2023
                                                  tac
                              70320 Feb 17
                                            2023
-rwxr-xr-x. 1 root root
                                                  tail
-rwxr-xr-x. 1 root root
                              28808 May 31
                                            2023
                                                  tapestat
-rwxr-xr-x. 1 root root
                             527704 Mar 24
                                            2023
                                                  tar
-rwxr-xr-x. 1 root root
                              24568 Jan 29
                                            2023
                                                  taskset
-rwxr-xr-x. 1 root root
                             138184 Jan 30
                                            2023
                                                  tbl
-rwxr-xr-x. 1 root root
                               1586 Mar 8
                                            2016
                                                  tcptraceroute
-rwxr-xr-x. 1 root root
                             488200 Feb 14
                                            2023
                                                  tcsh
                             37144 Feb 17
-rwxr-xr-x. 1 root root
                                            2023
                                                  tee
                              45440 Feb 17
                                            2023
-rwxr-xr-x. 1 root root
                                                  test
-rwxr-xr-x. 1 root root
                              90672 Jun
                                        8 20:21
                                                  tic
-rwxr-xr-x. 1 root root
                              28840 Feb
                                         2
                                           2023
                                                  time
```

```
-rwxr-xr-x. 1 root root
                              49576 Sep 12 19:44
                                                   timedatectl
-rwxr-xr-x. 1 root root
                              41736 Feb 17
                                             2023
                                                   timeout
-rwxr-xr-x. 1 root root
                              20464 Feb 10
                                             2023
                                                   tload
                              24576 Jun 8 20:21
-rwxr-xr-x. 1 root root
                                                   toe
                             136624 Feb 10
-rwxr-xr-x. 1 root root
                                             2023
                                                   top
                              94824 Feb 17
                                             2023
-rwxr-xr-x. 1 root root
                                                   touch
                              24608 Jun 8 20:21
-rwxr-xr-x. 1 root root
                                                   tput
-rwxr-xr-x. 1 root root
                              49600 Feb 17
                                            2023
                                                   tr
-rwxr-xr-x. 1 root root
                                         3 16:59
                              27928 Nov
                                                   tracepath
-rwxr-xr-x. 1 root root
                              79784 Feb
                                         2
                                            2023
                                                   traceroute
lrwxrwxrwx. 1 root root
                                 10 Feb
                                         2
                                             2023
                                                   traceroute6 -> traceroute
                             749736 Jan 30
-rwxr-xr-x. 1 root root
                                             2023
                                                  troff
-rwxr-xr-x. 1 root root
                              32824 Feb 17
                                             2023
-rwxr-xr-x. 1 root root
                              37112 Feb 17 2023
                                                  truncate
                             211008 Sep 11 08:05
-rwxr-xr-x. 1 root root
                                                  trust
                              28776 Jun 8 20:21
-rwxr-xr-x. 1 root root
                                                   tset
-rwxr-xr-x. 1 root root
                              49520 Feb 17
                                             2023
                                                   tsort
-rwxr-xr-x. 1 root root
                              33000 Feb 17
                                             2023
                                                   tty
-rwxr-xr-x. 1 root root
                             129240 Nov 8 00:44
                                                   turbostat
-rwxr-xr-x. 1 root root
                                 32 Jan 28
                                            2023
                                                   type
-rwxr-xr-x. 1 root root
                              15352 Oct 23 22:53
                                                   tzselect
-rwxr-xr-x. 1 root root
                              28824 Jan 29
                                            2023
                                                   uclampset
-rwxr-xr-x. 1 root root
                             590752 Sep 12 19:44
                                                   udevadm
-rwxr-xr-x. 1 root root
                              24600 Jan 29
                                            2023
                                                   ul
-rwxr-xr-x. 1 root root
                                 34 Jan 28
                                             2023
                                                   ulimit
                                 33 Jan 28
                                             2023
-rwxr-xr-x. 1 root root
                                                   umask
-rwsr-xr-x. 1 root root
                              36896 Jan 29
                                             2023
                                                   umount
-rwxr-xr-x. 1 root root
                                 35 Jan 28
                                             2023
                                                   unalias
-rwxr-xr-x. 1 root root
                              33016 Feb 17
                                             2023
                                                   uname
lrwxrwxrwx. 1 root root
                                  7 Jan 29
                                             2023
                                                   uname26 -> setarch
-rwxr-xr-x. 1 root root
                              41280 Feb 17
                                             2023
                                                   unexpand
-rwxr-xr-x. 1 root root
                               2633 Jan 31
                                             2023
                                                   unicode start
                                367 Feb 27
-rwxr-xr-x. 1 root root
                                             2012
                                                   unicode_stop
-rwxr-xr-x. 1 root root
                              45472 Feb 17
                                             2023
                                                   uniq
                              33016 Feb 17
                                             2023
-rwxr-xr-x. 1 root root
                                                   unlink
                                             2023
                              37192 Jan 29
-rwxr-xr-x. 1 root root
                                                   unshare
lrwxrwxrwx. 1 root root
                                  2 Jan 29
                                             2023
                                                   unxz -> xz
-rwxr-xr-x. 2 root root
                             201952 Jan 29
                                             2023
                                                   unzip
                                                   unzipsfx
-rwxr-xr-x. 1 root root
                              90568 Jan 29
                                             2023
lrwxrwxrwx. 1 root root
                                  4 Oct 26 08:12
                                                   unzstd -> zstd
-rwxr-xr-x. 1 root root
                               1851 Oct 13 16:38
                                                   update-ca-trust
-rwxr-xr-x. 1 root root
                                 87 Apr 28
                                                   update-crypto-policies
                                            2022
-rwxr-xr-x. 1 root root
                              16336 Feb 10
                                             2023
                                                   uptime
-rwxr-xr-x. 1 root root
                              53768 Sep 12 19:44
                                                   userdbctl
-rwxr-xr-x. 1 root root
                              37136 Feb 17
                                             2023
                                                   users
-rwxr-xr-x. 1 root root
                              16168 Jan 31
                                             2023
                                                   usleep
                              24552 Jan 29
                                             2023
-rwxr-xr-x. 1 root root
                                                   utmpdump
-rwxr-xr-x. 1 root root
                              20320 Jan 29
                                             2023
                                                   uuidgen
-rwxr-xr-x. 1 root root
                              24560 Jan 29
                                             2023
                                                   uuidparse
-rwxr-xr-x. 1 root root
                             142040 Feb 17
                                             2023
                                                   vdir
                                         3 23:13
-rwxr-xr-x. 1 root root
                                691 Nov
                                                   νi
-rwxr-xr-x. 1 root root
                                         3 23:13
                                 150 Nov
                                                   view
-rwxr-xr-x. 1 root root
                            4216280 Nov
                                         3 23:13
                                                   vim
                                                   vimdiff -> vim
                                         3 23:13
lrwxrwxrwx. 1 root root
                                  3 Nov
-rwxr-xr-x. 1 root root
                               2158 Nov 3 23:13
                                                   vimtutor
-rwxr-xr-x. 1 root root
                              24760 Jan 31 2023
                                                   vlock
-rwxr-xr-x. 1 root root
                              41016 Feb 10
                                             2023
                                                   vmstat
-rwxr-xr-x. 1 root root
                              24584 Feb 10
                                             2023
                                 32 Jan 28
                                             2023
-rwxr-xr-x. 1 root root
                                                   wait
-rwxr-xr-x. 1 root root
                              24568 Jan 29
                                             2023
                                                   wall
-rwxr-xr-x. 1 root root
                              29200 Feb 10
                                             2023
                                                   watch
-rwxr-xr-x. 1 root root
                              45360 Feb 17
                                             2023
                                                   WC
-rwxr-xr-x. 1 root root
                              32872 Jan 29
                                             2023
                                                   wdctl
-rwxr-xr-x. 1 root root
                             526528 Jun
                                         5
                                             2023
                                                   wget
lrwxrwxrwx. 1 root root
                                 24 Nov 10 19:54
                                                   whatis -> /etc/alternatives/what
-rwxr-xr-x. 1 root root
                              50472 Feb 1
                                             2023
                                                   whatis.man-db
-rwxr-xr-x. 1 root root
                              33392 Jan 29
                                             2023
                                                   whereis
-rwxr-xr-x. 1 root root
                              29344 Jan 30
                                             2023
                                                   which
```

```
-rwxr-xr-x. 1 root root
                               36904 Feb 1
                                              2023
                                                    whiptail
                               53600 Feb 17
                                              2023
-rwxr-xr-x. 1 root root
                                                    who
-rwxr-xr-x. 1 root root
                               33024 Feb 17
                                              2023
                                                    whoami
                               24576 Jan 29
                                             2023
-rwxr-sr-x. 1 root tty
                                                    write
lrwxrwxrwx. 1 root root
                                    7 Jan 29
                                              2023
                                                    x86 64 -> setarch
-rwxr-xr-x. 1 root root
                                 615 Apr 11 2023
                                                    x86 64-amazon-linux-gnu-pkg-conf
ia
-rwxr-xr-x. 1 root root
                               31912 Nov 8 00:44
                                                    x86 energy perf policy
-rwxr-xr-x. 1 root root
                               66200 Jan 30 2023
                                                    xargs
-rwxr-xr-x. 1 root root
                              305128 Jan 28 2023
                                                    xgettext
                               24496 Oct 11 18:18
-rwxr-xr-x. 1 root root
                                                    xmlcatalog
                               83264 Oct 11 18:18
-rwxr-xr-x. 1 root root
                                                    xmllint
-rwxr-xr-x. 1 root root
                               41376 Jan 29 2023 xmlwf
                               24736 Nov 3 23:13 xxd
-rwxr-xr-x. 1 root root
                               87080 Jan 29 2023 xz
-rwxr-xr-x. 1 root root
lrwxrwxrwx. 1 root root
                                    2 Jan 29
                                              2023 xzcat -> xz
lrwxrwxrwx. 1 root root
                                    6 Jan 29
                                              2023 xzcmp -> xzdiff
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                               16328 Jan 29
                                              2023
                                                    xzdec
                                6637 Jan 29
                                              2023
                                                    xzdiff
lrwxrwxrwx. 1 root root
                                    6 Jan 29
                                              2023
                                                    xzegrep -> xzgrep
lrwxrwxrwx. 1 root root
                                    6 Jan 29
                                              2023 xzfgrep -> xzgrep
                                5908 Jan 29
-rwxr-xr-x. 1 root root
                                              2023 xzgrep
-rwxr-xr-x. 1 root root
                                1803 Jan 29
                                              2023
                                                   xzless
-rwxr-xr-x. 1 root root
                                2166 Jan 29
                                             2023
                                                   xzmore
-rwxr-xr-x. 1 root root
                               32856 Feb 17
                                             2023
                                                    yes
lrwxrwxrwx. 1 root root
                                   8 Jan 31
                                              2023
                                                    ypdomainname -> hostname
lrwxrwxrwx. 1 root root
                                    5 Jan 31
                                              2023
                                                    yum -> dnf-3
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                                1988 Feb 8
                                              2023
                                                    zcat
                                1682 Feb
                                          8
                                              2023
                                                    zcmp
-rwxr-xr-x. 1 root root
                                6464 Feb 8
                                              2023
                                                    zdiff
-rwxr-xr-x. 1 root root
                               28616 Oct 23 22:56
                                                    zdump
-rwxr-xr-x. 1 root root
                                  33 Feb 8 2023
                                                    zegrep
                                  33 Feb 8 2023 zfgrep
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                                2085 Feb 8 2023 zforce
                                8116 Feb 8 2023 zgrep
-rwxr-xr-x. 1 root root
                              202824 Jan 29
                                              2023 zip
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                               74144 Jan 29
                                              2023
                                                    zipcloak
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 2 root root
                                2957 Oct 10
                                              2008
                                                    zipgrep
                              201952 Jan 29
                                              2023
                                                    zipinfo
-rwxr-xr-x. 1 root root
                               65800 Jan 29
                                              2023
                                                    zipnote
                               65720 Jan 29
-rwxr-xr-x. 1 root root
                                              2023
                                                    zipsplit
-rwxr-xr-x. 1 root root
                                2210 Feb 8
                                              2023
                                                    zless
                                1846 Feb 8
-rwxr-xr-x. 1 root root
                                              2023
                                                    zmore
-rwxr-xr-x. 1 root root
                                4581 Feb 8
                                             2023
                                                   znew
lrwxrwxrwx. 1 root root
                                    6 Jan 30 2023 zsoelim -> soelim
                              896200 Oct 26 08:12 zstd
-rwxr-xr-x. 1 root root
lrwxrwxrwx. 1 root root
                                    4 Oct 26 08:12
                                                    zstdcat -> zstd
-rwxr-xr-x. 1 root root
-rwxr-xr-x. 1 root root
                                3873 Apr
                                          4
                                              2023
                                                    zstdarep
                                 201 Apr 4 2023
                                                    zstdless
lrwxrwxrwx. 1 root root
                                    4 Oct 26 08:12
                                                    zstdmt -> zstd
[ec2-user@ip-172-31-19-79 bin]$ cd ...
[ec2-user@ip-172-31-19-79 /]$ ls
      dev home lib64 media opt
                                       root sbin sys
bin
                                                        usr
                 local mnt
boot etc lib
                                proc run
                                             srv
                                                   tmp
                                                        var
[ec2-user@ip-172-31-19-79 /]$ cd root
-bash: cd: root: Permission denied
[ec2-user@ip-172-31-19-79 /]$ ls
bin dev home lib64 media opt
boot etc lib local mnt proc
[ec2-user@ip-172-31-19-79 /]$ ^C
                                       root sbin
                                                   SVS
                                                        usr
                                proc run
                                             srv
                                                   tmp
                                                        var
[ec2-user@ip-172-31-19-79 /]$ sudo su root
[root@ip-172-31-19-79 /]# cd root
[root@ip-172-31-19-79 ~]# ls
[root@ip-172-31-19-79 ~]# pwd
[root@ip-172-31-19-79 ~]#
```