

# homework2python

April 1, 2020

```
[ ]: cd /
```

/

```
[2]: pwd
```

```
[2]: '/'
```

```
[3]: ls
```

```
bin/      etc/      lib/
mkdir/    root/    srv/      usr/
boot/     home/    lib64/
mnt/      run/     swap.img  var/
cdrom/    initrd.img@  lost+found/
opt/     /sbin/    sys/
vmlinuz@
dev/      initrd.img.old@  media/
proc/     snap/    tmp/
vmlinuz.old@
```

```
[4]: cd bin
```

/bin

```
[5]: ls
```

```
bash*          journalctl*
readlink*
btrfs*         kbd_mode*     red*
btrfsck@       kill*         rm*
btrfs-debug-tree*  kmod*        rmdir*
btrfs-find-root*  less*        rnano@
btrfs-image*     lessecho*    run-

parts*
btrfs-map-logical*  lessfile@    rzsh@
btrfs-select-super* lesskey*     sed*
btrfstune*         lesspipe*
```

setfacl*		
btrfs-zero-log*	ln*	
setfont*		
bunzip2*	loadkeys*	
setupcon*		
busybox*	login*	sh@
bzcat*	loginctl*	
sh.distrib@		
bzcmp@	lowntfs-3g*	sleep*
bzdiff*	ls*	ss*
bzegrep@	lsblk*	static-
sh@		
bzexe*	lsmod@	stty*
bzfgrep@	mkdir*	su*
bzgrep*	mkfs.btrfs*	sync*
bzip2*	mknod*	
systemctl*		
bzip2recover*	mktemp*	
systemd@		
bzless@	more*	systemd-
ask-password*		
bzmore*	mount*	systemd-
escape*		
cat*	mountpoint*	systemd-
hwdb*		
chacl*	mt@	systemd-
inhibit*		
chgrp*	mt-gnu*	systemd-
machine-id-setup*		
chmod*	mv*	systemd-
notify*		
chown*	nano*	systemd-
sysusers*		
chvt*	nc@	systemd-
tmpfiles*		
cp*	nc.openbsd*	systemd-
tty-ask-password-agent*		
cpio*	netcat@	tar*
dash*	netstat*	
tempfile*		
date*	networkctl*	touch*
dd*	nisdomainname@	true*

```

df*                ntfs-3g*
udevadm*
dir*               ntfs-3g.probe*
ulockmgr_server*
dmesg*            ntfs-cat*      umount*
dnsdomainname@    ntfscluster*  uname*
domainname@       ntfs-cmp*
uncompress*
dumpkeys*         ntfs-fallocate*
unicode_start*
echo*             ntfsfix*        vdir*
ed*               ntfsinfo*      wdctl*
efibootdump*      ntfs-ls*        which*
efibootmgr*       ntfs-move*
whiptail*
egrep*            ntfs-recover*
ypdomainname@
false*            ntfs-secaudit*  zcat*
fgconsole*        ntfs-truncate*  zcmp*
fgrep*            ntfs-usermap*  zdiff*
findmnt*          ntfs-wipe*       zegrep*
fsck.btrfs*       open@            zfgrep*
fuser*            openvt*          zforce*
fusermount*       pidof@           zgrep*
getfacl*          ping*            zless*
grep*             ping4@           zmore*
gunzip*           ping6@           znew*
gzexe*            plymouth*        zsh*
gzip*             ps*              zsh5*
hostname*         pwd*
ip*               rbash@

```

```
[6]: cd /
```

```
/
```

```
[7]: ls
```

```

bin/    etc/    lib/
mkdir/  root/   srv/    usr/
boot/   home/   lib64/
mnt/    run/    swap.img var/
cdrom/   initrd.img@  lost+found/
opt/    sbin/   sys/
vmlinuz@
dev/    initrd.img.old@  media/
proc/   snap/   tmp/
vmlinuz.old@

```

```
[8]: cd boot
```

```
/boot
```

```
[9]: ls
```

```
config-4.15.0-88-generic      initrd.img-4.15.0-91-generic  
config-4.15.0-91-generic     System.map-4.15.0-88-generic  
efi/                          System.map-4.15.0-91-generic  
grub/                         vmlinuz-4.15.0-88-generic  
initrd.img-4.15.0-88-generic vmlinuz-4.15.0-91-generic
```

```
[10]: cd cdrom
```

```
[Errno 2] No such file or directory: 'cdrom'  
/boot
```

```
[11]: pwd
```

```
[11]: '/boot'
```

```
[12]: cd /
```

```
/
```

```
[13]: pwd
```

```
[13]: '/'
```

```
[14]: ls
```

```
bin/      etc/      lib/  
mkdir/    root/    srv/      usr/  
boot/     home/    lib64/  
mnt/      run/     swap.img  var/  
cdrom/    initrd.img@  lost+found/  
opt/     /sbin/    sys/  
vmlinuz@  
dev/      initrd.img.old@  media/  
proc/     snap/    tmp/  
vmlinuz.old@
```

```
[15]: cd lib
```

```
/lib
```

```
[16]: ls
```

```

apparmor/      init/
netplan/
console-setup/ klibc-wBFLvVtxy4xJqEadIBJMa78iJz8.so*
open-iscsi/
cpp@           libhandle.so.1@
recovery-mode/
crda/          libhandle.so.1.0.3
systemd/
cryptsetup/    lsb/
terminfo/
ebtables/      modprobe.d/
udev/
firmware/      modules/
ufw/
hdparm/        modules-load.d/
x86_64-linux-gnu/

```

```
[17]: cd apparmor
```

```
/lib/apparmor
```

```
[18]: ls
```

```
functions  profile-load*
```

```
[19]: cd /
```

```
/
```

```
[20]: ls
```

```

bin/    etc/      lib/
mkdir/  root/    srv/      usr/
boot/   home/    lib64/
mnt/    run/     swap.img  var/
cdrom/   initrd.img@  lost+found/
opt/     sbin/    sys/
vmlinuz@
dev/     initrd.img.old@  media/
proc/    snap/    tmp/
vmlinuz.old@

```

```
[21]: cd boot
```

```
/boot
```

```
[22]: ls
```

```
config-4.15.0-88-generic      initrd.img-4.15.0-91-generic
config-4.15.0-91-generic      System.map-4.15.0-88-generic
efi/                          System.map-4.15.0-91-generic
grub/                         vmlinuz-4.15.0-88-generic
initrd.img-4.15.0-88-generic  vmlinuz-4.15.0-91-generic
```

```
[23]: cd efi
```

```
/boot/efi
```

```
[24]: ls
```

```
EFI/
```

```
[25]: cd EFI
```

```
/boot/efi/EFI
```

```
[26]: ls
```

```
BOOT/  ubuntu/
```

```
[27]: cd BOOT
```

```
/boot/efi/EFI/BOOT
```

```
[28]: ls
```

```
BOOTX64.EFI*  fbx64.efi*
```

```
[29]: cd /
```

```
/
```

```
[30]: cd lost+found
```

```
[Errno 13] Permission denied: 'lost+found'
```

```
/
```

```
[31]: pwd
```

```
[31]: '/'
```

```
[32]: cd mkdir
```

```
/mkdir
```

```
[33]: ls
```

```
[34]: cd /
```

```
/
```

```
[35]: cd dev
```

```
/dev
```

```
[36]: ls
```

```
autofs          kmsg
sda1            tty3            tty6
ttyS30
block/          kvm              sda2
tty30 tty60      ttyS31
bsg/            lightnvm/        sg0
tty31 tty61      ttyS4
btrfs-control  log@             shm/
tty32 tty62      ttyS5
bus/            loop0
snapshot tty33 tty63
ttyS6
char/           loop1            snd/
tty34 tty7        ttyS7
console         loop2            stderr@
tty35 tty8        ttyS8
core@           loop3            stdin@
tty36 tty9        ttyS9
cpu/            loop4            stdout@
tty37 ttyprintk  uhid
cpu_dma_latency loop5            tty
tty38 ttyS0      uinput
cuse            loop6            tty0
tty39 ttyS1      urandom
disk/           loop7            tty1
tty4 ttyS10      usb/
dri/            loop-control     tty10
tty40 ttyS11     userio
ecryptfs        mapper/          tty11
tty41 ttyS12     vcs
fb0             mcelog           tty12
tty42 ttyS13     vcs1
fd@             mei0             tty13
tty43 ttyS14     vcs2
full           mem              tty14
tty44 ttyS15     vcs3
fuse           memory_bandwidth tty15
tty45 ttyS16     vcs4
```

hidraw0		queue/	tty16
tty46	ttyS17	vcs5	
hidraw1		net/	tty17
tty47	ttyS18	vcs6	
hpet		network_latency	tty18
tty48	ttyS19	vcsa	
hugepages/		network_throughput	tty19
tty49	ttyS2	vcsa1	
hwrng		null	tty2
tty5	ttyS20	vcsa2	
i2c-0		port	tty20
tty50	ttyS21	vcsa3	
i2c-1		ppp	tty21
tty51	ttyS22	vcsa4	
i2c-2		psaux	tty22
tty52	ttyS23	vcsa5	
i2c-3		ptmx	tty23
tty53	ttyS24	vcsa6	
i2c-4		pts/	tty24
tty54	ttyS25	vfio/	
i2c-5		random	tty25
tty55	ttyS26	vga_arbiter	
i2c-6		rfskill	tty26
tty56	ttyS27	vhci	
i2c-7		rtc@	tty27
tty57	ttyS28	vhost-net	
initctl@		rtc0	tty28
tty58	ttyS29	vhost-vsock	
input/		sda	tty29
tty59	ttyS3	zero	

```
[37]: cd input
```

```
/dev/input
```

```
[38]: ls
```

```
by-id/    event0  event10
event3    event5  event7  event9
mouse0
by-path/  event1  event2
event4    event6  event8  mice
```

```
[39]: cd by-id
```

```
/dev/input/by-id
```

```
[40]: ls
```



```
usb-Compx_2.4G_Receiver-event-kbd@      usb-  
Compx_2.4G_Receiver-if01-mouse@  
usb-Compx_2.4G_Receiver-if01-event-mouse@
```

```
[43]: cd /
```

```
/
```

```
[45]: man date
```

```
DATE(1)      User Commands      DATE(1)
```

```
NAME
```

```
date - print or set the system date and time
```

```
SYNOPSIS
```

```
date [OPTION]... [+FORMAT]
```

```
date [-u|--utc|--universal] [MMDDhhmm[[CC]YY][.ss]]
```

```
DESCRIPTION
```

```
Display the current time in the given FORMAT, or set the system date.
```

```
Mandatory arguments to long options are mandatory for short options too.
```

```
-d, --date=STRING
```

```
display time described by STRING, not 'now'
```

```
--debug
```

```
annotate the parsed date, and warn about questionable usage to stderr
```

```
-f, --file=DATEFILE
```

```
like --date; once for each line of DATEFILE
```

```
-I[FMT], --iso-8601[=FMT]
```

```
output date/time in ISO 8601 format. FMT='date' for date only (the default), 'hours', 'minutes', 'seconds', or 'ns' for date and time to the indicated precision. Example:  
2006-08-14T02:34:56-06:00
```

```
-R, --rfc-email
```

```
output date and time in RFC 5322 format. Example: Mon, 14 Aug 2006 02:34:56 -0600
```

```
--rfc-3339=FMT
```

```
output date/time in RFC 3339 format. FMT='date', 'seconds', or
```

'ns' for date and time to the indicated precision. Example:  
2006-08-14 02:34:56-06:00

-r, --reference=FILE  
display the last modification time of FILE

-s, --set=STRING  
set time described by STRING

-u, --utc, --universal  
print or set Coordinated Universal Time (UTC)

--help display this help and exit

--version  
output version information and exit

FORMAT controls the output. Interpreted sequences are:

%%	a literal %
%a	locale's abbreviated weekday name (e.g., Sun)
%A	locale's full weekday name (e.g., Sunday)
%b	locale's abbreviated month name (e.g., Jan)
%B	locale's full month name (e.g., January)
%c	locale's date and time (e.g., Thu Mar 3 23:05:25 2005)
%C	century; like %Y, except omit last two digits (e.g., 20)
%d	day of month (e.g., 01)
%D	date; same as %m/%d/%y
%e	day of month, space padded; same as %_d
%F	full date; same as %Y-%m-%d
%g	last two digits of year of ISO week number (see %G)
%G	year of ISO week number (see %V); normally useful only with %V
%h	same as %b
%H	hour (00..23)

%I hour (01..12)  
 %j day of year (001..366)  
 %k hour, space padded ( 0..23); same as %\_H  
 %l hour, space padded ( 1..12); same as %\_I  
 %m month (01..12)  
 %M minute (00..59)  
 %n a newline  
 %N nanoseconds (000000000..999999999)  
 %p locale's equivalent of either AM or PM; blank if not known  
 %P like %p, but lower case  
 %q quarter of year (1..4)  
 %r locale's 12-hour clock time (e.g., 11:11:04 PM)  
 %R 24-hour hour and minute; same as %H:%M  
 %s seconds since 1970-01-01 00:00:00 UTC  
 %S second (00..60)  
 %t a tab  
 %T time; same as %H:%M:%S  
 %u day of week (1..7); 1 is Monday  
 %U week number of year, with Sunday as first day of week (00..53)  
 %V ISO week number, with Monday as first day of week (01..53)  
 %w day of week (0..6); 0 is Sunday  
 %W week number of year, with Monday as first day of week (00..53)  
 %x locale's date representation (e.g., 12/31/99)  
 %X locale's time representation (e.g., 23:13:48)

%y last two digits of year (00..99)

%Y year

%z +hhmm numeric time zone (e.g., -0400)

%:z +hh:mm numeric time zone (e.g., -04:00)

%::z +hh:mm:ss numeric time zone (e.g., -04:00:00)

%:::z numeric time zone with : to necessary precision (e.g., -04, +05:30)

%Z alphabetic time zone abbreviation (e.g., EDT)

By default, date pads numeric fields with zeroes. The following optional flags may follow '%':

- (hyphen) do not pad the field

\_ (underscore) pad with spaces

0 (zero) pad with zeros

^ use upper case if possible

# use opposite case if possible

After any flags comes an optional field width, as a decimal number; then an optional modifier, which is either E to use the locale's alternate representations if available, or O to use the locale's alternate numeric symbols if available.

#### EXAMPLES

Convert seconds since the epoch (1970-01-01 UTC) to a date

```
$ date --date='@2147483647'
```

Show the time on the west coast of the US (use tzselect(1) to find TZ)

```
$ TZ='America/Los_Angeles' date
```

Show the local time for 9AM next Friday on the west coast of the US

```
$ date --date='TZ="America/Los_Angeles" 09:00 next Fri'
```

#### DATE STRING

The `--date=STRING` is a mostly free format human readable date string such as "Sun, 29 Feb 2004 16:21:42 -0800" or "2004-02-29 16:21:42" or even "next Thursday". A date string may contain items indicating calendar date, time of day, time zone, day of week, relative time, relative date, and numbers. An empty string indicates the beginning of the day. The date string format is more complex than is easily documented here but is fully described in the info documentation.

#### AUTHOR

Written by David MacKenzie.

#### REPORTING BUGS

GNU coreutils online help: <<http://www.gnu.org/software/coreutils/>>  
Report date translation bugs to <<http://translationproject.org/team/>>

#### COPYRIGHT

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This is free software: you are free to change and redistribute it.  
There is NO WARRANTY, to the extent permitted by law.

#### SEE ALSO

Full documentation at: <<http://www.gnu.org/software/coreutils/date>>  
or available locally via: `info '(coreutils) date invocation'`

GNU coreutils 8.28 January 2018 DATE(1)

```
[50]: from datetime import datetime
      now = datetime.now()
      print("now =", now)
```

```
now = 2020-04-01 00:58:14.822665
```

```
[ ]:
```