

Презентация по лабораторной работе №6

Маслова А.П.

14 марта 2024

Российский университет дружбы народов, Москва, Россия

Информация

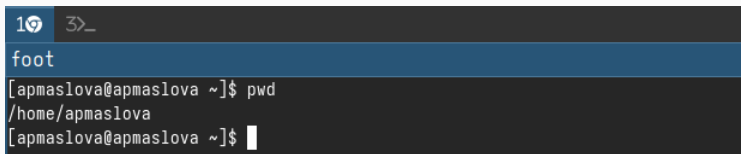
- Маслова Анна Павловна
- студентка, НПИбд-02-23
- факультет физико-математических и естественных наук, направление прикладная информатиика
- Российский университет дружбы народов
- 1132236134@pfur.ru

Приобретение практических навыков взаимодействия пользователя с системой посредством командной строки.

Выполнение лабораторной работы

Полное имя домашнего каталога

Определим полное имя нашего домашнего каталога. Далее относительно этого каталога будем выполнять последующие упражнения.



```
1 3>  
foot  
[apmaslova@apmaslova ~]$ pwd  
/home/apmaslova  
[apmaslova@apmaslova ~]$
```

Рис. 1: Полное имя домашнего каталога

Содержимое каталога /tmp

Выведем на экран содержимое каталога /tmp. Для этого используем команду `ls` различными опциями. Используем опции `-a` и `-l`:

[illegible]

Рис. 2: Содержимое каталога /tmp

Опция -a выводит список содержимого вместе со скрытыми файлами. А опция -l позволяет увидеть подробную информацию о содержимом. При этом о каждом файле и каталоге будет выведена следующая информация:

- тип файла,
- право доступа,
- число ссылок,
- владелец,
- размер,
- дата последней ревизии,
- имя файла или каталога.

Содержимое каталога /tmp

Далее используем опцию -aLF:

```
[apraslova@apraslova tmp]$ ls -aLF
итого 32
drwxrwxrwt. 15 root root 480 map 14 09:16 ./
dr-xr-xr-x. 1 root root 158 ноя 1 04:05 ../
drwxrwxrwt. 2 root root 40 map 14 09:15 font-unix/
drwxrwxrwt. 2 root root 40 map 14 09:15 ICE-unix/
srwx-tw-rw-. 1 root root 0 map 14 09:15 .iprt-localipc-DRMipcSe
srwxr-xr-x. 1 root root 0 map 14 09:15 sddm-auth-49964004-2262
srwx----- 1 sddm sddm 0 map 14 09:15 sddm--Pftpdd=
drwx----- 3 root root 60 map 14 09:15 systemd-private-94d1206
drwx----- 3 root root 60 map 14 09:15 systemd-private-94d1206
drwx----- 3 root root 60 map 14 09:15 systemd-private-94d1206
drwx----- 3 root root 60 map 14 09:15 systemd-private-94d1206
drwx----- 3 root root 60 map 14 09:15 systemd-private-94d1206
drwx----- 3 root root 60 map 14 09:15 systemd-private-94d1206
drwx----- 3 root root 60 map 14 09:15 systemd-private-94d1206
drwx----- 3 root root 60 map 14 09:15 systemd-private-94d1206
-rw-r--r--. 1 root root 28886 map 14 09:15 vboxquest-Module.syvner
-r--r--r--. 1 apraslova apraslova 11 map 14 09:16 .X0-lock
drwxrwxrwt. 2 root root 60 map 14 09:16 X11-unix/
drwxrwxrwt. 2 root root 40 map 14 09:15 X10-unix/
[apraslova@apraslova tmp]$
```

Рис. 3: Содержимое каталога /tmp

Эта опция позволяет увидеть такую же подробную информацию о всех файлах, включая скрытые.

Определим, есть ли в каталоге /var/spool подкаталог с именем cron.

```
[apmaslova@apmaslova tmp]$ ls /var/spool  
abrt  abrt-upload  anacron  at  cron  cups  lpd  mail  plymouth  
[apmaslova@apmaslova tmp]$
```

Рис. 4: Содержимое /var/spool

Содержимое домашней директории

Перейдём в наш домашний каталог и выведем на экран его содержимое.

```
[apmaslova@apmaslova tmp]$ cd
[apmaslova@apmaslova ~]$ ls -l
итого 24
drwxr-xr-x. 1 apmaslova apmaslova   0 мар 11 22:35 Desktop
drwxr-xr-x. 1 apmaslova apmaslova 100 мар 11 20:43 Downloads
drwxr-xr-x. 1 apmaslova apmaslova  74 мар 10 22:20 git-extended
-rw-r--r--. 1 apmaslova apmaslova 18657 мар 11 01:00 LICENSE
-rw-r--r--. 1 apmaslova apmaslova  26 мар 11 00:13 pass.txt
drwxr-xr-x. 1 apmaslova apmaslova  10 фев 29 23:18 work
drwxr-xr-x. 1 apmaslova apmaslova   0 фев 17 15:40 Видео
drwxr-xr-x. 1 apmaslova apmaslova   0 фев 17 15:40 Документы
drwxr-xr-x. 1 apmaslova apmaslova 1258 мар  2 03:10 Загрузки
drwxr-xr-x. 1 apmaslova apmaslova  546 мар 11 00:46 Изображения
drwxr-xr-x. 1 apmaslova apmaslova   0 фев 17 15:40 Музыка
drwxr-xr-x. 1 apmaslova apmaslova   0 фев 17 15:40 Общедоступные
drwxr-xr-x. 1 apmaslova apmaslova   0 фев 17 15:40 'Рабочий стол'
drwxr-xr-x. 1 apmaslova apmaslova   0 фев 17 15:40 Шаблоны
[apmaslova@apmaslova ~]$
```

Рис. 5: Содержимое домашней директории

Для того, чтобы узнать, кому принадлежат файлы, использовали опцию `-l`. Видим, что файлы принадлежат пользователю `apmaslova` (мне).

Создание и удаление каталогов

В домашнем каталоге создадим новый каталог с именем `newdir`. Затем в каталоге `~/newdir` создадим новый каталог с именем `morefun`. Далее в домашнем каталоге создадим одной командой три новых каталога с именами `letters`, `memos`, `misk` и удалим эти каталоги одной командой.

```
[apmaslova@apmaslova ~]$ mkdir newdir
[apmaslova@apmaslova ~]$ mkdir newdir/morefun
[apmaslova@apmaslova ~]$ mkdir letters memos misk
[apmaslova@apmaslova ~]$ ls
Desktop  Downloads  git-extended  letters  LICENSE  memos  misk  newdir
[apmaslova@apmaslova ~]$ rm letters memos misk
rm: невозможно удалить 'letters': Это каталог
rm: невозможно удалить 'memos': Это каталог
rm: невозможно удалить 'misk': Это каталог
[apmaslova@apmaslova ~]$ rmdir letters memos misk
[apmaslova@apmaslova ~]$ ls
Desktop  Downloads  git-extended  LICENSE  newdir  pass.txt  work  Видео
[apmaslova@apmaslova ~]$
```

Рис. 6: Создание и удаление каталогов

Удаление ~/newdir/morefun

Попробуем удалить ранее созданный каталог ~/newdir командой `rm`. Проверим, был ли каталог удалён. Затем после неудачной попытки удалим каталог ~/newdir/morefun из домашнего каталога с помощью опции `-r`. Проверим корректность выполнения команды.

```
[армаслова@армаслова ~]$ rm newdir
rm: невозможно удалить 'newdir': Это каталог
[армаслова@армаслова ~]$ rmdir newdir
rmdir: не удалось удалить 'newdir': Каталог не пуст
[армаслова@армаслова ~]$ rmdir -r newdir
rmdir: неверный ключ «-r»
По команде «rmdir --help» можно получить дополнительную информацию.
[армаслова@армаслова ~]$ rm -r newdir
[армаслова@армаслова ~]$ ls
Desktop  Downloads  git-extended  LICENSE  pass.txt  work  Видео  Документы
[армаслова@армаслова ~]$
```

Рис. 7: Удаление ~/newdir/morefun

Как мы видим, опция `-r` позволяет удалять каталоги вместе со всем их содержимым.

Команда `man` для различных команд

А набор опций команды `ls`, позволяющий отсортировать по времени последнего изменения выводимый список содержимого каталога с развёрнутым описанием файлов таков: `ls -t -l`.

Используем команду `man` для просмотра описания следующих команд: `cd`, `pwd`, `mkdir`, `rmdir`, `rm`.

Команда man для cd

```
cd [-l][-P [-e]] [-R] [dir]
```

Change the current directory to `dir`. If `dir` is not supplied, the value of the `HOME` shell variable is the default. The variable `CDPATH` defines the search path for the directory containing `dir`: each directory name in `CDPATH` is searched for `dir`. Alternative directory names in `CDPATH` are separated by a colon (:). A null directory name in `CDPATH` is the same as the current directory, i.e., `.`. If `dir` begins with a slash (/), then `CDPATH` is not used. The `-P` option causes `cd` to use the physical directory structure by resolving symbolic links while traversing `dir` and before processing instances of `..` in `dir` (see also the `-P` option to the `set` builtin command); the `-L` option forces symbolic links to be followed by resolving the link after processing instances of `..` in `dir`. If `..` appears in `dir`, it is processed by resolving the immediately previous pathname component from `dir`, back to a slash or the beginning of `dir`. If the `-e` option is supplied with `-P`, and the current working directory cannot be successfully determined after a successful directory change, `cd` will return an unsuccessful status. On systems that support it, the `-@` option presents the extended attributes associated with a file as a directory. An argument of `-` is converted to `$OLDPWD` before the directory change is attempted. If a non-empty directory name from `CDPATH` is used, or if `-` is the first argument, and the directory change is successful, the absolute pathname of the new working directory is written to the standard output. If the directory change is successful, `cd` sets the value of the `PWD` environment variable to the new directory name, and sets the `OLDPWD` environment variable to the value of the current working directory before the change. The return value is true if the directory was successfully changed; false otherwise.

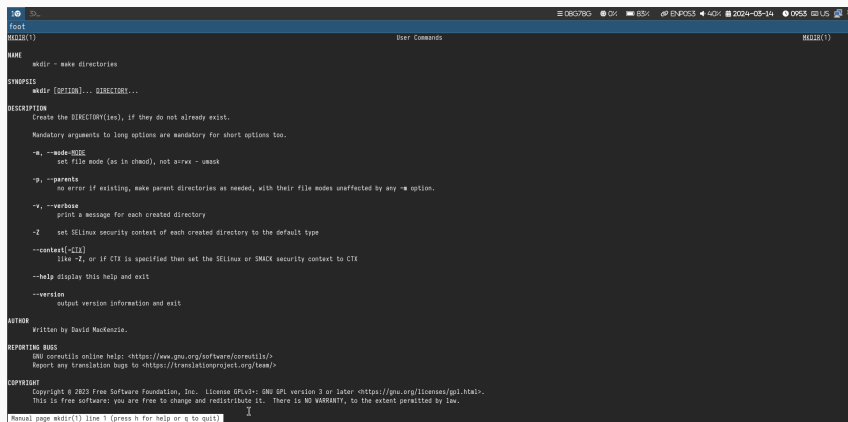
Рис. 9: Команда man для cd

Команда man для pwd

```
pwd [-LP]
Print the absolute pathname of the current working directory. The pathname printed contains no symbolic links if the -P option is supplied or the -o physical option to the set builtin command is enabled. If the -L option is used, the pathname printed may contain symbolic links. The return status is 0 unless an error occurs while reading the name of the current directory or an invalid option is supplied.
```

Рис. 10: Команда man для pwd

Команда man для mkdir



```
foot
mkdir(1)                                User Commands                                mkdir(1)

NAME
mkdir - make directories

SYNOPSIS
mkdir [OPTION]... DIRECTORY...

DESCRIPTION
Create the DIRECTORY(ies), if they do not already exist.

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

-m, --mode=MODE
    set file mode (as in chmod), not a-rwx - umask

-p, --parents
    no error if existing, make parent directories as needed, with their file modes unaffected by any -m option.

-v, --verbose
    print a message for each created directory

-Z
    set SELinux security context of each created directory to the default type

--context[=CTX]
    like -Z, or if CTX is specified then set the SELinux or SMACK security context to CTX

--help
    display this help and exit

--version
    output version information and exit

AUTHOR
Written by David MacKenzie.

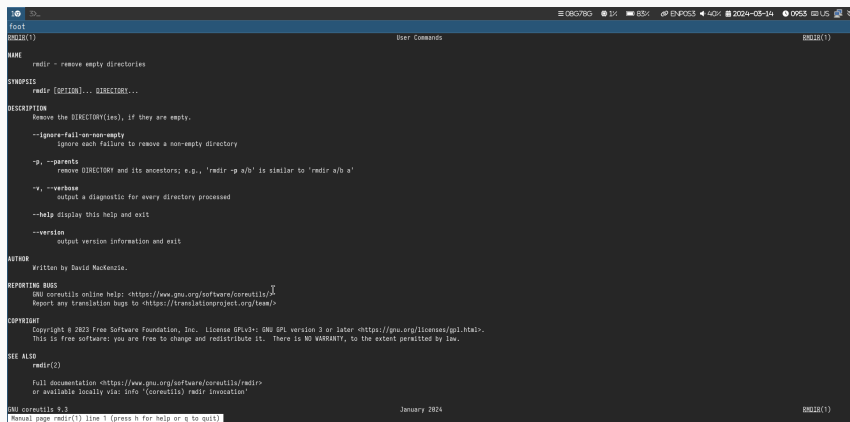
REPORTING BUGS
GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Report any translation bugs to <https://translationproject.org/team/>

COPYRIGHT
Copyright © 2023 Free Software Foundation, Inc.  License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
This is free software: you are free to change and redistribute it.  There is NO WARRANTY, to the extent permitted by law.

Manual page mkdir(1) line 1 (press h for help or q to quit)
```

Рис. 11: Команда man для mkdir

Команда man для rmdir



```
foot
rmdir(1) User Commands rmdir(1)

NAME
  rmdir - remove empty directories

SYNOPSIS
  rmdir [OPTION]... DIRECTORY...

DESCRIPTION
  Remove the DIRECTORY(ies), if they are empty.

  --ignore-fail-on-non-empty
    Ignore each failure to remove a non-empty directory

  -p, --parents
    remove DIRECTORY and its ancestors; e.g., 'rmdir -p a/b' is similar to 'rmdir a/b a'

  -v, --verbose
    output a diagnostic for every directory processed

  --help
    display this help and exit

  --version
    output version information and exit

AUTHOR
  Written by David MacKenzie.

REPORTING BUGS
  GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
  Report any translation bugs to <https://translationproject.org/team/>

COPYRIGHT
  Copyright © 2023 Free Software Foundation, Inc. License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
  This is free software: you are free to change and redistribute it. There is NO WARRANTY, to the extent permitted by law.

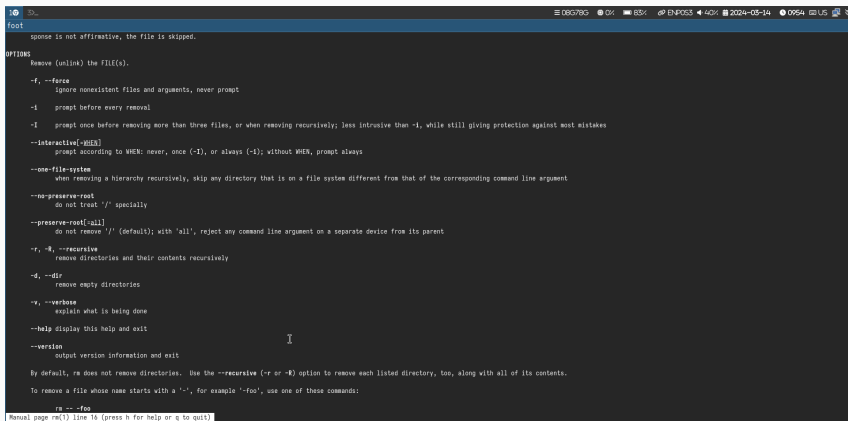
SEE ALSO
  rmdir(2)

  Full documentation <https://www.gnu.org/software/coreutils/rmdir>
  or available locally via: info '(coreutils) rmdir invocation'

GNU coreutils 9.3 January 2024 rmdir(1)
Manual page rmdir(1) line 1 (press h for help or q to quit)
```

Рис. 12: Команда man для rmdir

Команда man для rm



```
foot
sponse is not affirmative, the file is skipped.

OPTIONS
Remove (unlink) the FILE(s).

-f, --force
    Ignore nonexistent files and arguments, never prompt

-i
    prompt before every removal

-I
    prompt once before removing more than three files, or when removing recursively; less intrusive than -i, while still giving protection against most mistakes

--interactive[=WHEN]
    prompt according to WHEN: never, once (-I), or always (-I); without WHEN, prompt always

--one-file-system
    when removing a hierarchy recursively, skip any directory that is on a file system different from that of the corresponding command line argument

--no-preserve-root
    do not treat '/' specially

--preserve-root[=all]
    do not remove '/' (default); with 'all', reject any command line argument on a separate device from its parent

-r, -R, --recursive
    remove directories and their contents recursively

-d, --dir
    remove empty directories

-v, --verbose
    explain what is being done

--help display this help and exit

--version
    output version information and exit

By default, rm does not remove directories. Use the --recursive (-r or -R) option to remove each listed directory, too, along with all of its contents.

To remove a file whose name starts with a '-', for example '-foo', use one of these commands:

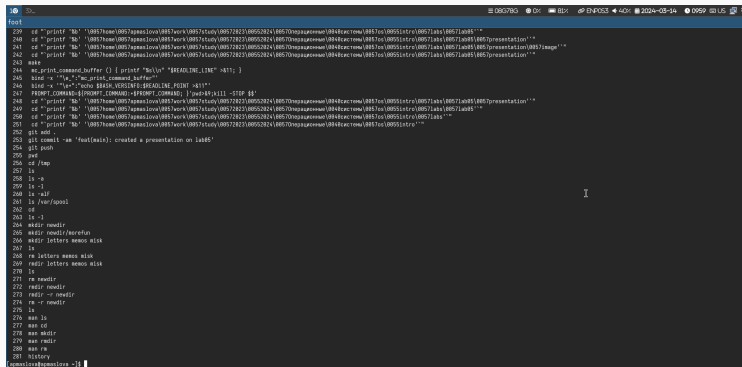
    rm -- -foo

Manual page rm(1) line 16 (press h for help or q to quit)
```

Рис. 13: Команда man для rm

Команда history

Используя информацию, полученную при помощи команды `history`, выполним модификацию и исполнение нескольких команд из буфера команд



```
239 cd "printf 'b' '\0057team\0057apexlove\0057work\0057study\00572023\00552024\0057операционные\0048системы\0057os\0055intro\0057lab\0057lab05'"
240 cd "printf 'b' '\0057team\0057apexlove\0057work\0057study\00572023\00552024\0057операционные\0048системы\0057os\0055intro\0057lab\0057lab05\0057presentation'"
241 cd "printf 'b' '\0057team\0057apexlove\0057work\0057study\00572023\00552024\0057операционные\0048системы\0057os\0055intro\0057lab\0057lab05\0057presentation\0057image'"
242 cd "printf 'b' '\0057team\0057apexlove\0057work\0057study\00572023\00552024\0057операционные\0048системы\0057os\0055intro\0057lab\0057lab05\0057presentation'"
243 exit
244 nc_print_command_buffer () { printf "%s\n" "$READLINE_LINE" >&1; }
245 bind -x '"\x1b":nc_print_command_buffer"'
246 bind -x '"\x1b":echo $1$2$3$4$5$6$7$8$9$10$11$12$13$14$15$16$17$18$19$20$21$22$23$24$25$26$27$28$29$30$31$32$33$34$35$36$37$38$39$40$41$42$43$44$45$46$47$48$49$50$51$52$53$54$55$56$57$58$59$60$61$62$63$64$65$66$67$68$69$70$71$72$73$74$75$76$77$78$79$80$81$82$83$84$85$86$87$88$89$90$91$92$93$94$95$96$97$98$99$100$101$102$103$104$105$106$107$108$109$110$111$112$113$114$115$116$117$118$119$120$121$122$123$124$125$126$127$128$129$130$131$132$133$134$135$136$137$138$139$140$141$142$143$144$145$146$147$148$149$150$151$152$153$154$155$156$157$158$159$160$161$162$163$164$165$166$167$168$169$170$171$172$173$174$175$176$177$178$179$180$181$182$183$184$185$186$187$188$189$190$191$192$193$194$195$196$197$198$199$200$201$202$203$204$205$206$207$208$209$210$211$212$213$214$215$216$217$218$219$220$221$222$223$224$225$226$227$228$229$230$231$232$233$234$235$236$237$238$239$240$241$242$243$244$245$246$247$248$249$250$251$252$253$254$255$256$257$258$259$260$261$262$263$264$265$266$267$268$269$270$271$272$273$274$275$276$277$278$279$280$281$282$283$284$285$286$287$288$289$290$291$292$293$294$295$296$297$298$299$300$301$302$303$304$305$306$307$308$309$310$311$312$313$314$315$316$317$318$319$320$321$322$323$324$325$326$327$328$329$330$331$332$333$334$335$336$337$338$339$340$341$342$343$344$345$346$347$348$349$350$351$352$353$354$355$356$357$358$359$360$361$362$363$364$365$366$367$368$369$370$371$372$373$374$375$376$377$378$379$380$381$382$383$384$385$386$387$388$389$390$391$392$393$394$395$396$397$398$399$400$401$402$403$404$405$406$407$408$409$410$411$412$413$414$415$416$417$418$419$420$421$422$423$424$425$426$427$428$429$430$431$432$433$434$435$436$437$438$439$440$441$442$443$444$445$446$447$448$449$450$451$452$453$454$455$456$457$458$459$460$461$462$463$464$465$466$467$468$469$470$471$472$473$474$475$476$477$478$479$480$481$482$483$484$485$486$487$488$489$490$491$492$493$494$495$496$497$498$499$500$501$502$503$504$505$506$507$508$509$510$511$512$513$514$515$516$517$518$519$520$521$522$523$524$525$526$527$528$529$530$531$532$533$534$535$536$537$538$539$540$541$542$543$544$545$546$547$548$549$550$551$552$553$554$555$556$557$558$559$560$561$562$563$564$565$566$567$568$569$570$571$572$573$574$575$576$577$578$579$580$581$582$583$584$585$586$587$588$589$590$591$592$593$594$595$596$597$598$599$600$601$602$603$604$605$606$607$608$609$610$611$612$613$614$615$616$617$618$619$620$621$622$623$624$625$626$627$628$629$630$631$632$633$634$635$636$637$638$639$640$641$642$643$644$645$646$647$648$649$650$651$652$653$654$655$656$657$658$659$660$661$662$663$664$665$666$667$668$669$670$671$672$673$674$675$676$677$678$679$680$681$682$683$684$685$686$687$688$689$690$691$692$693$694$695$696$697$698$699$700$701$702$703$704$705$706$707$708$709$710$711$712$713$714$715$716$717$718$719$720$721$722$723$724$725$726$727$728$729$730$731$732$733$734$735$736$737$738$739$740$741$742$743$744$745$746$747$748$749$750$751$752$753$754$755$756$757$758$759$760$761$762$763$764$765$766$767$768$769$770$771$772$773$774$775$776$777$778$779$780$781$782$783$784$785$786$787$788$789$790$791$792$793$794$795$796$797$798$799$800$801$802$803$804$805$806$807$808$809$810$811$812$813$814$815$816$817$818$819$820$821$822$823$824$825$826$827$828$829$830$831$832$833$834$835$836$837$838$839$840$841$842$843$844$845$846$847$848$849$850$851$852$853$854$855$856$857$858$859$860$861$862$863$864$865$866$867$868$869$870$871$872$873$874$875$876$877$878$879$880$881$882$883$884$885$886$887$888$889$890$891$892$893$894$895$896$897$898$899$900$901$902$903$904$905$906$907$908$909$910$911$912$913$914$915$916$917$918$919$920$921$922$923$924$925$926$927$928$929$930$931$932$933$934$935$936$937$938$939$940$941$942$943$944$945$946$947$948$949$950$951$952$953$954$955$956$957$958$959$960$961$962$963$964$965$966$967$968$969$970$971$972$973$974$975$976$977$978$979$980$981$982$983$984$985$986$987$988$989$990$991$992$993$994$995$996$997$998$999$1000$1001$1002$1003$1004$1005$1006$1007$1008$1009$1010$1011$1012$1013$1014$1015$1016$1017$1018$1019$1020$1021$1022$1023$1024$1025$1026$1027$1028$1029$1030$1031$1032$1033$1034$1035$1036$1037$1038$1039$1040$1041$1042$1043$1044$1045$1046$1047$1048$1049$1050$1051$1052$1053$1054$1055$1056$1057$1058$1059$1060$1061$1062$1063$1064$1065$1066$1067$1068$1069$1070$1071$1072$1073$1074$1075$1076$1077$1078$1079$1080$1081$1082$1083$1084$1085$1086$1087$1088$1089$1090$1091$1092$1093$1094$1095$1096$1097$1098$1099$1100$1101$1102$1103$1104$1105$1106$1107$1108$1109$1110$1111$1112$1113$1114$1115$1116$1117$1118$1119$1120$1121$1122$1123$1124$1125$1126$1127$1128$1129$1130$1131$1132$1133$1134$1135$1136$1137$1138$1139$1140$1141$1142$1143$1144$1145$1146$1147$1148$1149$1150$1151$1152$1153$1154$1155$1156$1157$1158$1159$1160$1161$1162$1163$1164$1165$1166$1167$1168$1169$1170$1171$1172$1173$1174$1175$1176$1177$1178$1179$1180$1181$1182$1183$1184$1185$1186$1187$1188$1189$1190$1191$1192$1193$1194$1195$1196$1197$1198$1199$1200$1201$1202$1203$1204$1205$1206$1207$1208$1209$1210$1211$1212$1213$1214$1215$1216$1217$1218$1219$1220$1221$1222$1223$1224$1225$1226$1227$1228$1229$1230$1231$1232$1233$1234$1235$1236$1237$1238$1239$1240$1241$1242$1243$1244$1245$1246$1247$1248$1249$1250$1251$1252$1253$1254$1255$1256$1257$1258$1259$1260$1261$1262$1263$1264$1265$1266$1267$1268$1269$1270$1271$1272$1273$1274$1275$1276$1277$1278$1279$1280$1281$1282$1283$1284$1285$1286$1287$1288$1289$1290$1291$1292$1293$1294$1295$1296$1297$1298$1299$1300$1301$1302$1303$1304$1305$1306$1307$1308$1309$1310$1311$1312$1313$1314$1315$1316$1317$1318$1319$1320$1321$1322$1323$1324$1325$1326$1327$1328$1329$1330$1331$1332$1333$1334$1335$1336$1337$1338$1339$1340$1341$1342$1343$1344$1345$1346$1347$1348$1349$1350$1351$1352$1353$1354$1355$1356$1357$1358$1359$1360$1361$1362$1363$1364$1365$1366$1367$1368$1369$1370$1371$1372$1373$1374$1375$1376$1377$1378$1379$1380$1381$1382$1383$1384$1385$1386$1387$1388$1389$1390$1391$1392$1393$1394$1395$1396$1397$1398$1399$1400$1401$1402$1403$1404$1405$1406$1407$1408$1409$1410$1411$1412$1413$1414$1415$1416$1417$1418$1419$1420$1421$1422$1423$1424$1425$1426$1427$1428$1429$1430$1431$1432$1433$1434$1435$1436$1437$1438$1439$1440$1441$1442$1443$1444$1445$1446$1447$1448$1449$1450$1451$1452$1453$1454$1455$1456$1457$1458$1459$1460$1461$1462$1463$1464$1465$1466$1467$1468$1469$1470$1471$1472$1473$1474$1475$1476$1477$1478$1479$1480$1481$1482$1483$1484$1485$1486$1487$1488$1489$1490$1491$1492$1493$1494$1495$1496$1497$1498$1499$1500$1501$1502$1503$1504$1505$1506$1507$1508$1509$1510$1511$1512$1513$1514$1515$1516$1517$1518$1519$1520$1521$1522$1523$1524$1525$1526$1527$1528$1529$1530$1531$1532$1533$1534$1535$1536$1537$1538$1539$1540$1541$1542$1543$1544$1545$1546$1547$1548$1549$1550$1551$1552$1553$1554$1555$1556$1557$1558$1559$1560$1561$1562$1563$1564$1565$1566$1567$1568$1569$1570$1571$1572$1573$1574$1575$1576$1577$1578$1579$1580$1581$1582$1583$1584$1585$1586$1587$1588$1589$1590$1591$1592$1593$1594$1595$1596$1597$1598$1599$1600$1601$1602$1603$1604$1605$1606$1607$1608$1609$1610$1611$1612$1613$1614$1615$1616$1617$1618$1619$1620$1621$1622$1623$1624$1625$1626$1627$1628$1629$1630$1631$1632$1633$1634$1635$1636$1637$1638$1639$1640$1641$1642$1643$1644$1645$1646$1647$1648$1649$1650$1651$1652$1653$1654$1655$1656$1657$1658$1659$1660$1661$1662$1663$1664$1665$1666$1667$1668$1669$1670$1671$1672$1673$1674$1675$1676$1677$1678$1679$1680$1681$1682$1683$1684$1685$1686$1687$1688$1689$1690$1691$1692$1693$1694$1695$1696$1697$1698$1699$1700$1701$1702$1703$1704$1705$1706$1707$1708$1709$1710$1711$1712$1713$1714$1715$1716$1717$1718$1719$1720$1721$1722$1723$1724$1725$1726$1727$1728$1729$1730$1731$1732$1733$1734$1735$1736$1737$1738$1739$1740$1741$1742$1743$1744$1745$1746$1747$1748$1749$1750$1751$1752$1753$1754$1755$1756$1757$1758$1759$1760$1761$1762$1763$1764$1765$1766$1767$1768$1769$1770$1771$1772$1773$1774$1775$1776$1777$1778$1779$1780$1781$1782$1783$1784$1785$1786$1787$1788$1789$1790$1791$1792$1793$1794$1795$1796$1797$1798$1799$1800$1801$1802$1803$1804$1805$1806$1807$1808$1809$1810$1811$1812$1813$1814$1815$1816$1817$1818$1819$1820$1821$1822$1823$1824$1825$1826$1827$1828$1829$1830$1831$1832$1833$1834$1835$1836$1837$1838$1839$1840$1841$1842$1843$1844$1845$1846$1847$1848$1849$1850$1851$1852$1853$1854$1855$1856$1857$1858$1859$1860$1861$1862$1863$1864$1865$1866$1867$1868$1869$1870$1871$1872$1873$1874$1875$1876$1877$1878$1879$1880$1881$1882$1883$1884$1885$1886$1887$1888$1889$1890$1891$1892$1893$1894$1895$1896$1897$1898$1899$1900$1901$1902$1903$1904$1905$1906$1907$1908$1909$1910$1911$1912$1913$1914$1915$1916$1917$1918$1919$1920$1921$1922$1923$1924$1925$1926$1927$1928$1929$1930$1931$1932$1933$1934$1935$1936$1937$1938$1939$1940$1941$1942$1943$1944$1945$1946$1947$1948$1949$1950$1951$1952$1953$1954$1955$1956$1957$1958$1959$1960$1961$1962$1963$1964$1965$1966$1967$1968$1969$1970$1971$1972$1973$1974$1975$1976$1977$1978$1979$1980$1981$1982$1983$1984$1985$1986$1987$1988$1989$1990$1991$1992$1993$1994$1995$1996$1997$1998$1999$2000$2001$2002$2003$2004$2005$2006$2007$2008$2009$2010$2011$2012$2013$2014$2015$2016$2017$2018$2019$2020$2021$2022$2023$2024$2025$2026$2027$2028$2029$2030$2031$2032$2033$2034$2035$2036$2037$2038$2039$2040$2041$2042$2043$2044$2045$2046$2047$2048$2049$2050$2051$2052$2053$2054$2055$2056$2057$2058$2059$2060$2061$2062$2063$2064$2065$2066$2067$2068$2069$2070$2071$2072$2073$2074$2075$2076$2077$2078$2079$2080$2081$2082$2083$2084$2085$2086$2087$2088$2089$2090$2091$2092$2093$2094$2095$2096$2097$2098$2099$2100$2101$2102$2103$2104$2105$2106$2107$2108$2109$2110$2111$2112$2113$2114$2115$2116$2117$2118$2119$2120$2121$2122$2123$2124$2125$2126$2127$2128$2129$2130$2131$2132$2133$2134$2135$2136$2137$2138$2139$2140$2141$2142$2143$2144$2145$2146$2147$2148$2149$2150$2151$2152$2153$2154$2155$2156$2157$2158$2159$2160$2161$2162$2163$2164$2165$2166$2167$2168$2169$2170$2171$2172$2173$2174$2175$2176$2177$2178$2179$2180$2181$2182$2183$2184$2185$2186$2187$2188$2189$2190$2191$2192$2193$2194$2195$2196$2197$2198$2199$2200$2201$2202$2203$2204$2205$2206$2207$2208$2209$2210$2211$2212$2213$2214$2215$2216$2217$2218$2219$2220$2221$2222$2223$2224$2225$2226$2227$2228$2229$2230$2231$2232$2233$2234$2235$2236$2237$2238$2239$2240$2241$2242$2243$2244$2245$2246$2247$2248$2249$2250$2251$2252$2253$2254$2255$2256$2257$2258$2259$2260$2261$2262$2263$2264$2265$2266$2267$2268$2269$2270$2271$2272$2273$2274$2275$2276$2277$2278$2279$2280$2281$2282$2283$2284$2285$2286$2287$2288$2289$2290$2291$2292$2293$2294$2295$2296$2297$2298$2299$2300$2301$2302$2303$2304$2305$2306$2307$2308$2309$2310$2311$2312$2313$2314$2315$2316$2317$2318$2319$2320$2321$2322$2323$2324$2325$2326$2327$2328$2329$2330$2331$2332$2333$2334$2335$2336$2337$2338$2339$2340$2341$2342$2343$2344$2345$2346$2347$2348$2349$2350$2351$2352$2353$2354$2355$2356$2357$2358$2359$2360$2361$2362$2363$2364$2365$2366$2367$2368$2369$2370$2371$2372$2373$2374$2375$2376$2377$2378$2379$2380$2381$2382$2383$2384$2385$2386$2387$2388$2389$2390$2391$2392$2393$2394$2395$2396$2397$2398$2399$2400$2401$2402$2403$2404$2405$2406$2407$2408$2409$2410$2411$2412$2413$2414$2415$2416$2417$2418$2419$2420$2421$2422$2423$2424$2425$2426$2427$2428$2429$2430$2431$2432$2433$2434$2435$2436$2437$2438$2439$2440$2441$2442$2443$2444$2445$2446$2447$2448$2449$2450$2451$2452$2453$2454$2455$2456$2457$2458$2459$2460$2461$2462$2463$2464$2465$2466$2467$2468$2469$2470$2471$2472$2473$2474$2475$2476$2477$2478$2479$2480$2481$2482$2483$2484$2485$2486$2487$2488$2489$2490$2491$2492$2493$2494$2495$2496$2497$2498$2499$2500$2501$2502$2503$2504$2505$2506$2507$2508$2509$2510$2511$2512$2513$2514$2515$2516$2517$2518$2519$2520$2521$2522$2523$2524$2525$2526$2527$2528$2529$2530$2531$2532$2533$2534$2535$2536$2537$2538$2539$2540$2541$2542$2543$2544$2545$2546$2547$2548$2549$2550$2551$2552$2553$2554$25
```

Модификация команды ls

[illegible]

Рис. 15: Модификация команды ls

Модификация команд mkdir и rmdir

```
[apmaslova@apmaslova ~]$ !264:s/newdir/correctdir
mkdir correctdir
[apmaslova@apmaslova ~]$ ls
correctdir  Desktop  Downloads  git-extended  LICENSE  pass.txt  work  Видео  Документы  Загрузки  Изображ
[apmaslova@apmaslova ~]$ !272:s/newdir/correctdir
rmdir correctdir
[apmaslova@apmaslova ~]$ ls
Desktop  Downloads  git-extended  LICENSE  pass.txt  work  Видео  Документы  Загрузки  Изображения  Музыка
[apmaslova@apmaslova ~]$
```

Рис. 16: Модификация команд mkdir и rmdir

Выводы

Мы ознакомились с настройкой `dotfiles` и научились использовать менеджер паролей `pass`. Ознакомились с `chezmoi`. Научились углубленной работе с `git`.