1.

ls ./new-\*/as\*.c ./new-\*/as\*.h

Xrisimopoiise tin ls kai psakse ston katalogo pou vriskomai (./) an iparxei kapoios katalogos pou to onoma tou ksekina me ‘new-’ kai mesa tou periexei kapoio arxeio pou to onoma tou ksekina apo ‘as’ kai telionei se ‘.c’. Kai psakse an iparxei kapoios katalogos pou to onoma tou ksekina me ‘new-’ kai mesa tou periexei kapoio arxeio pou to onoma tou ksekina apo ‘as’ kai telionei se ‘.h’.

2.

find -type f -name '\*.c' -exec egrep '^#' {} \; | wc -l

Psakse (find) se olous tous ipokatalogous tou parontos katalogou se olo to vathos ola ta arxeia (-type f) pou exoun san xaraktiristiko onoma otidipote kai na telionoun se ‘.c’. Xrisimopoioume to -exec gia na ektelesoume kati sta arxeia pou vriskei i find. Vres tis grammes (grep) pou ksekinoun (^) me ‘#’. Oi aggiles xrisimopoiountai gia na diksoume oti ekei tha perasei to onoma tou arxeiou pou vriskei i find. Telos metrise (wc) tis grammes (-l) pou arxizoun apo #. Anazitoume ton charaktira ‘#’ sta arxeia giati gnorizoume oti oi entoles pros ton epeksergasti arxizoun me ‘#’.

3.

ls -lc | egrep '^-'| tr -s ' ' | cut -f9 -d' ' | grep '^.....\.c$' |head -n 5 | xargs rm

Xrisimopoiise tin ls kai parousiase ta arxeia taksinomimena me vasi to create time tous (c) se lista (l). Vres tis grammes (egrep) pou arxizoun (^) me ton xaraktira ‘-’ gia na paroume mono ta files. Metatrepse (tr) tous sinexomenous xaraktires (-s) pou einai space me mono ena space (‘ ’). Kopse (cut) tin 9i stili (-f9) opou gia diaxoristiko metaksi ton stilon xrisimopoiise to space (-d’ ‘). Psakse gia arxeia opou exoun akrivos 5 xaraktires kai einai tou tipou .c (‘^.....\.c$'). Pare tis 5 protes grammes apo tin arxi (head -n 5). Dioxetefse stin rm grammi grammi (xargs) onomaton arxeion gia diagrafi.

4.

gcc wavengine.c |& grep -i 'error' | egrep 'c:13[0-9]{1}:' | cut -f2 -d':' | sort | uniq

// xrisi tou regex c: gia na imaste sigouri oti the parume to proto meros tou output

ksekina me 13 ke exei ena tixaio arithmo apo 0 mexri 9

Error stream

By default, the standard error streams ("stderr") of the processes in a pipeline are not passed on through the pipe; instead, they are merged and directed to the console. However, many shells have additional syntax for changing this behavior. In the csh shell, for instance, using "|&" instead of "|" signifies that the standard error stream should also be merged with the standard output and fed to the next process. The Bourne Shell can also merge standard error with |& since bash 4.0[3] or using 2>&1, as well as redirect it to a different file.

5.

who -u | sort | cut -f1 -d' ' | uniq | egrep '^cs|a$'

6.

find . -name "\*.c" -exec iconv -f ISO-8859-7 -t UTF-8 {} -o {} \;

7.

egrep \*.c -e '#include' | cut -f2 -d'"' | cut -f2 -d'<' | cut -f1 -d'>' | sort | uniq

8.

ps -axu | egrep -e 'S[a-zA-Z0-9]\*l' | tr -s ' '| cut -f2,11 -d' ' | tr -d '[' |tr -d ']'

9.

cat mycommands.txt | sort | uniq -c | sort -r | tr -s ' ' | cut -f3 -d' ' | head -n 1 | xargs man

10.

ps -e | tee processes.txt | tail -n 8 | sort -k4

Ergasia 5 EPL232

Marios Pafitis

911719

1.

ls ./new-\*/as\*.c ./new-\*/as\*.h

Xrisimopoiise tin ls kai psakse ston katalogo pou vriskomai (./) an iparxei kapoios katalogos pou to onoma tou ksekina me ‘new-’

kai mesa tou periexei kapoio arxeio pou to onoma tou ksekina apo ‘as’ kai telionei se ‘.c’. Kai psakse an iparxei kapoios katalogos

pou to onoma tou ksekina me ‘new-’ kai mesa tou periexei kapoio arxeio pou to onoma tou ksekina apo ‘as’ kai telionei se ‘.h’.

2.

find -type f -name '\*.c' -exec egrep '^#' {} \; | wc -l

Psakse (find) se olous tous ipokatalogous tou parontos katalogou se olo to vathos ola ta arxeia (-type f) pou exoun san xaraktiristiko

onoma otidipote kai na telionoun se ‘.c’. Xrisimopoioume to -exec gia na ektelesoume kati sta arxeia pou vriskei i find. Vres tis

grammes (grep) pou ksekinoun (^) me ‘#’. Oi aggiles xrisimopoiountai gia na diksoume oti ekei tha perasei to onoma tou arxeiou pou

vriskei i find. Telos metrise (wc) tis grammes (-l) pou arxizoun apo #. Anazitoume ton charaktira ‘#’ sta arxeia giati gnorizoume

oti oi entoles pros ton epeksergasti arxizoun me ‘#’.

3.

ls -lc | egrep '^-'| tr -s ' ' | cut -f9 -d' ' | grep '^.....\.c$' | head -n 5 | xargs rm

Xrisimopoiise tin ls kai parousiase ta arxeia taksinomimena me vasi to create time tous (c) se lista (l). Vres tis grammes (egrep) pou

arxizoun (^) me ton xaraktira ‘-’ gia na paroume mono ta files. Metatrepse (tr) tous sinexomenous xaraktires (-s) pou einai space se ena

mono space (‘ ’). Kopse (cut) tin 9i stili (-f9) opou gia diaxoristiko metaksi ton stilon xrisimopoiise to space (-d’ ‘). Psakse gia

arxeia opou exoun akrivos 5 xaraktires kai einai tou tipou .c (‘^.....\.c$'). Pare tis 5 protes grammes apo tin arxi (head -n 5).

Dioxetefse stin rm grammi grammi (xargs) onomaton arxeion gia diagrafi.

4.

gcc wavengine.c |& grep -i 'error' | egrep 'c:13[0-9]{1}:' | cut -f2 -d':' | sort | uniq

Kane compile (gcc) to programma wavengine.c kai dioxeteuse to standard error (|&) stin epomeni entoli. Xrisimopoieitai to '|&' kai oxi to

'|' gia to pipe giati to standard error by default enonetai me to console. Vres tis grammes (grep) xoris case sensitive (-i) pou periexoun

tin leksi error. Psakse tis grammes opou periexoun tin akolouthia xaraktiron c:13 kai exoun ena tuxaio arithmo apo 0 mexri 9 kai meta akolouthei

o xaraktiras ':'. Xrisimopoioume ton elexo na ksekina apo c: gia na veveothoume oti pernoume tin sosti akolouthia arithmo pou psaxnoume kai

orizoume oti meta to 13 iparxei mono enas {1} xaraktiras gia na min tixei na paroume arithmous opos 13 i 1333. Kovoume (cut) tin 2i stili (-f2)

me diaxoristiko stilis ton xaraktira ':' (-d':'). Taksinomise to apotelesma (sort) kai diagrapse tis diplotipies (uniq).

5.

who -u | sort | cut -f1 -d' ' | uniq | egrep '^cs|a$'

Parousiase tous sindedemenous xristes sto sistima (who) se morfi listas (-u). Taksinomise tous (sort) kai kopse (cut) tin 1i stili (-f1) me

diaxoristiko stilis to space (-d' '). Diagrapse tis diplotipies (uniq) kai vres tis grammes (egrep) pou ksekinoun me cs i telionoun se a ('^cs|a$')

6.

find . -name "\*.c" -exec iconv -f ISO-8859-7 -t UTF-8 {} -o {} \;

Psakse (find) ston paron katalogo (.) ola ta arxeia me onoma (-name) \*.c, diladi ola ta arxeia me tipo .c. Ektelese (-exec) gia kathe arxeio

allagi tis kodikopoiisis tou (iconv) apo tipo (-f) ISO-8859-7 se tipo (-t) UTF-8 kai apothikefse to arxeio (-o) me onoma idio me to arxiko ston

paron katalogo. I xrisi ton {} xrisimopoieitai gia na diksoume oti ine to onoma tou kathe arxeiou pou vriskei i find kai i xrisi ton xaraktiron

'\;' gia na dixnei ton termatismo tis kathe ektelesis tou (-exec).

7.

egrep \*.c -e '#include' | cut -f2 -d'"' | cut -f2 -d'<' | cut -f1 -d'>' | sort | uniq

Parousiase ta arxeia (egrep) pou telionoun se .c (\*.c) xrisimopoiontas regex (-e) tin akolouthia xaraktiron '#include'. Kopse (cut) tin 2i (-f2)

stili me diaxoristiko stilis ton xaraktira '"' (-d'"') an iparxei. Kopse (cut) tin 2i (-f2) stili me diaxoristiko stilis ton xaraktira '<' (-d'<')

an iparxei. Kopse (cut) tin 1i (-f1) stili me diaxoristiko stilis ton xaraktira '>' (-d'>') an iparxei. Taksinomise (sort) kai diagrapse tis

diplotipies apo to apotelesma (uniq).

8.

ps -axu | egrep -e ' S[a-zA-Z0-9]\*l' | tr -s ' '| cut -f2,11 -d' ' | tr -d '[' | tr -d']'

Parousiase oles (axu) tis diadikasies (ps) xrisimopoiontas BSD sintaksi. Deikse tis grammes (egrep) xrisimopoiontas regex (-e) pou periexoun tin

akolouthia xaraktiron 'S[a-zA-Z0-9]\*l' diladi periexoun to 'S' to 'l' kai anamesa tous kanenan, i kapoious epipleon xaraktires paradeigma: Sl, SNl, SNsl

kai oxi kapoio space. Metatrepse (tr) tous sinexomenous xaraktires (-s) pou einai space se ena mono space (‘ ’). Kopse (cut) tin 2i kai 11i stili

(-f2,11) me diaxoristiko stilis ton xaraktira ' ' (-d' '). Diagrapse (tr -d) tous xaraktires '['. Diagrapse (tr -d) tous xaraktires ']'.

9.

cat mycommands.txt | sort | uniq -c | sort -r | tr -s ' ' | cut -f3 -d' ' | head -n 1 | xargs man

Anoikse (cat) to arxeio mycommans.txt, taksinomise tis grammes tou (sort), diagrapse tis diplotimies kai metra poses fores epanalamvanete i kathe grammi

(uniq -c). Taksinomise se antitheti seira (sort -r) kai metatrepse (tr) tous sinexomenous xaraktires (-s) pou einai space se ena mono space (‘ ’). Kopse

(cut) tin 3i stili (-f3) xrisimopoiontas san diaxoristiko stilis ton xaraktira ' ' (-d' '). Pare apo tin arxi (head) tin 1i grammi (-n 1) kai perase to

apotelesma san argument (xargs) stin entoli man gia na parousiasei to manual tis entolis.

10.

ps -e | tee processes.txt | tail -n 8 | sort -k4

Emfanise oles (-e) tis diergasies (ps). Xrisimopoiise tin entolei (tee) gia na grapseis sto arxeio processes.txt kai proothise to output tis ps sto pipe

gia tin epomeni entoli. Pare tis teleftees (tail) 8 grammes (-n 8) tou output tis ps. Taksinomise (sort) me vasi tin 4i stili.(-k4)