

BASH

MAY 2022

PEKMEZCI

CODES

- <https://github.com/mehmetpekmezci/GTU-ENG-346/tree/main/bash-codes>

RULES

RULE #1:

Prepare a test environment before directly running on the real system.

RULE #2:

Test your commands and their outputs, then construct your script by using the commands you tested.

RULE #3:

Edit your script in a Linux editor or, in a code editor like VSCode or Notepad++ on windows.

EXPORT VARIABLES / BASH_SOURCE

```
echo "#####"
echo "##### EXPORT          #####"
echo "#####"
echo ""

MYVAR="VALUE1"
echo '
echo "MYVAR variable in export.release.sh : -- $MYVAR --"
MYVAR="VALUE2"
export MYVAR
' > export.release.sh

chmod +x ./export.release.sh
./export.release.sh
echo "MYVAR variable in main script : $MYVAR"

echo "#####"

export MYVAR
echo "Now exporting MYVAR in main script"
./export.release.sh
echo "#####"

source ./export.release.sh
echo "MYVAR variable in main script : $MYVAR after sourcing export.release.sh"

echo ""
echo "#####"
echo "##### BASH_SOURCE          #####"
echo "#####"
echo ""

echo '
CURRENT_DIR=$( cd "$( dirname "${BASH_SOURCE[0]}" )" && pwd )
export CURRENT_DIR
' > bash_source.release.sh

./bash_source.release.sh

echo "CURRENT_DIR variable in main script : $CURRENT_DIR after sourcing bash_source.release.sh"
```

```
#####

##### EXPORT          #####

#####

MYVAR variable in export.release.sh : -- --

MYVAR variable in main script : VALUE1

#####

Now exporting MYVAR in main script

MYVAR variable in export.release.sh : -- VALUE1 --

#####

MYVAR variable in export.release.sh : -- VALUE1 --

MYVAR variable in main script : VALUE2 after sourcing export.release.sh

#####

##### BASH_SOURCE          #####

#####

CURRENT_DIR variable in main script : /home/mpekmezci/bash after sourcing bash_source.release.sh
```

PARAMETERS / FUNCTIONS / IF / FIND

```
#!/bin/bash★

SCRIPT_NAME="$0"★

function print_usage_and_exit {
    tput setaf 1 ## RED★
    tput bold
    echo "$1"
    echo "Usage: ${SCRIPT_NAME} <dir> <expression> [a|d|f|l] <depth>"
    tput sgr0
    exit 1
}

if [ $# -lt 2 ]
then
    print_usage_and_exit "Wrong number of parameters :)"
fi

DIR="$1"
EXPRESSION="$2"★
TYPE="$3"
DEPTH="$4"

if [ ! -d $DIR ]; then print_usage_and_exit "Directory $DIR does not exist"; fi

if [ "$TYPE" != "" -a "$TYPE" != "a" -a "$TYPE" != "d" -a "$TYPE" != "f" -a "$TYPE" != "l" ]
then
    print_usage_and_exit "Type can only be one of the a,d,f,l or no-parameter"
fi

DEPTH_FIND_ARGUMENT=""
if [ "$DEPTH" != "" ]; then DEPTH_FIND_ARGUMENT="-maxdepth $DEPTH"; fi

TYPE_FIND_ARGUMENT=""
if [ "$TYPE" != "" ]; then TYPE_FIND_ARGUMENT="-type $TYPE"; fi

echo "find $DIR $DEPTH_FIND_ARGUMENT $TYPE_FIND_ARGUMENT -name $EXPRESSION"
find $DIR $DEPTH_FIND_ARGUMENT $TYPE_FIND_ARGUMENT -name "$EXPRESSION"
```

Annotations in the script:

- Red stars (★) mark the shebang, the script name assignment, and the type variable assignment.
- Blue text annotations: **\$#, \$?, \$!** points to the parameter count check; **-lt, -gt, -eq, -le, -ge** points to the parameter count comparison; **-d, -f, -e** points to the directory type check; **-a, -o** points to the logical AND/OR operators.
- A red oval highlights the error message: `print_usage_and_exit "Wrong number of parameters :)"`.

```
[mpekmezci@dev-host-01 bash]$ chmod +x 01.command.line.parameters.sh
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ *
find /var/tmp/mpekmezci/ -name 01.command.line.parameters.sh
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*'
find /var/tmp/mpekmezci/ -name *
/var/tmp/mpekmezci/
/var/tmp/mpekmezci/dir1
/var/tmp/mpekmezci/dir1/file2
/var/tmp/mpekmezci/dir1/file1
/var/tmp/mpekmezci/link_to_dir1
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*' d
find /var/tmp/mpekmezci/ -type d -name *
/var/tmp/mpekmezci/
/var/tmp/mpekmezci/dir1
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*' d 1
find /var/tmp/mpekmezci/ -maxdepth 1 -type d -name *
/var/tmp/mpekmezci/
/var/tmp/mpekmezci/dir1
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*' l 1
find /var/tmp/mpekmezci/ -maxdepth 1 -type l -name *
/var/tmp/mpekmezci/link_to_dir1
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/
Wrong number of parameters :
Usage: ./01.command.line.parameters.sh <dir> <expression> [a|d|f|l] <depth>
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*' z
Type can only be one of the a,d,f,l or no-parameter
Usage: ./01.command.line.parameters.sh <dir> <expression> [a|d|f|l] <depth>
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci1/ '*'
Directory /var/tmp/mpekmezci1/ does not exist
Usage: ./01.command.line.parameters.sh <dir> <expression> [a|d|f|l] <depth>
[mpekmezci@dev-host-01 bash]$
```

ASSIGN / TR / IFS

```
#!/bin/bash
echo "#####"
echo "##### ASSIGN OUTPUT OF A COMMAND TO A VARIABLE #####"
echo "#####"
echo ""
hostname
HOSTTYPE=$(hostname | cut -d- -f1)
if [ "$HOSTTYPE" == "dev" ]
then
    echo "This is a development host"
fi

echo ""
echo "#####"
echo "##### TR COMMAND USAGE #####"
echo "#####"
echo ""

export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/opt/eclipse/lib:/opt/havelsan/lib
echo $LD_LIBRARY_PATH | tr ':' '\n' | grep havelsan

echo ""
echo "#####"
echo "##### IFS VARIABLE USAGE #####"
echo "#####"
echo ""

echo " word1 word1.1 word1.2
word2.1 word2.2 word2.3" > /var/tmp/file1.txt

for i in $(cat /var/tmp/file1.txt); do echo $i; done
OLDIFS=$IFS
IFS="
"
for i in $(cat /var/tmp/file1.txt); do echo $i; done
IFS=$OLDIFS
```

```
#####
##### ASSIGN OUTPUT OF A COMMAND TO A VARIABLE #####
#####
```

dev-host-01
This is a development host

```
#####
##### TR COMMAND USAGE #####
#####
```

/opt/havelsan/jdk11/jdk-11.0.9/lib
/opt/havelsan/lib

```
#####
##### IFS VARIABLE USAGE #####
#####
```

word1
word1.1
word1.2
word2.1
word2.2
word2.3
word1 word1.1 word1.2
word2.1 word2.2 word2.3

AWK / CUT / SED

```
#!/bin/bash
echo ""
echo "#####"
echo "##### AWK USAGE #####"
echo "#####"
echo ""

ls -l
echo ""
ls -l | awk '{print $1-"$9}'
echo ""
ls -l | grep -v total | awk '{print $1-"$9}'

echo ""
echo "#####"
echo "##### CUT USAGE #####"
echo "#####"
echo ""

echo $PATH
echo $PATH | cut -d: -f1,2
echo "project-platform" | cut -d- -f2

echo ""
echo "#####"
echo "##### SED USAGE #####"
echo "#####"
echo ""

echo "mykey=myvalue"
echo "mykey=myvalue" | sed -e 's/.*=/'
echo "mykey=myvalue" | sed -e 's/=/'
echo "mykey=myvalue" > /var/tmp/temp1
cat /var/tmp/temp1 | sed -e 's/=/' > /var/tmp/temp2
cat /var/tmp/temp2
```

```
#####
##### AWK USAGE #####
#####
```

```
total 12
-rwxr-xr-x. 1 mpekmezci admin 925 May 12 15:44 01.command.line.parameters.sh
-rwxr-xr-x. 1 mpekmezci admin 1242 May 23 09:16 02.assign.tr.ifs.sh
-rwxr-xr-x. 1 mpekmezci admin 1160 May 23 09:23 03.awk.cut.sed.sh
```

```
total-
-rwxr-xr-x.-01.command.line.parameters.sh
-rwxr-xr-x.-02.assign.tr.ifs.sh
-rwxr-xr-x.-03.awk.cut.sed.sh
```

```
-rwxr-xr-x.-01.command.line.parameters.sh
-rwxr-xr-x.-02.assign.tr.ifs.sh
-rwxr-xr-x.-03.awk.cut.sed.sh
```

```
#####
##### CUT USAGE #####
#####
```

```
/home/mpekmezci/.local/bin:/home/mpekmezci/bin:/opt/havelsan/jdk11/jdk-11.0.9/bin:/opt/havelsan/
eclipse:/opt/gradle/gradle-7.4.2/bin:/opt/eclipse/eclipse:/usr/local/bin:/usr/bin:/usr/local/sbin:/usr/sbin
/home/mpekmezci/.local/bin:/home/mpekmezci/bin
platform
```

```
#####
##### SED USAGE #####
#####
```

```
mykey=myvalue
myvalue
mykey:myvalue
mykey:myvalue
```

TIMESTAMP / LOGGING / STDOUT / STDERR

```
#!/bin/bash
echo ""
echo "#####"
echo "##### TIMESTAMP AND LOGGING USAGE #####"
echo "#####"
echo ""

TIMESTAMP=$(date '+%Y%m%d%H%M%S')
echo $TIMESTAMP
(
  hostname
) >& /var/tmp/mylog.$TIMESTAMP

(
  hostname
) 1> /var/tmp/stdout.log.$TIMESTAMP

(
  hostname1
) 2> /var/tmp/stderr.log.$TIMESTAMP

for i in /var/tmp/*.${TIMESTAMP}; do echo ""; echo ""; echo "File :$i";echo "Content:"; cat $i; done
```

```
#####
##### TIMESTAMP AND LOGGING USAGE #####
#####
```

20220523112127

File :/var/tmp/mylog.20220523112127
Content:
dev-host-01

File :/var/tmp/stderr.log.20220523112127
Content:
./04.timestamp.logging.for.sh: line 19: hostname1: command not found

File :/var/tmp/stdout.log.20220523112127
Content:
dev-host-01

FOR

```
#!/bin/bash
echo ""
echo "#####"
echo "##### FOR USAGE 1 #####"
echo "#####"
echo ""

MAX=4
for((i=0;i<$MAX;i=i+1)); do echo $i; done

echo ""
echo "#####"
echo "##### FOR USAGE 2 #####"
echo "#####"
echo ""
touch /var/tmp/testfile1.txt /var/tmp/testfile2.txt
for myfile in /var/tmp/*.txt
do
    echo "Txt file name is $myfile"
done

echo "#####"
echo "##### FOR USAGE 3 #####"
echo "#####"
echo ""

echo "machine1:type1
machine2:type2
machine3:type1" > nodes.txt
for line in $(cat nodes.txt)
do
    machine=$(echo $line | cut -d\# -f1)
    mtype=$(echo $line | cut -d\# -f2)
    echo "Machine name is $machine which is of type $mtype "
done
```

```
#####
##### FOR USAGE 1 #####
#####

0
1
2
3

#####
##### FOR USAGE 2 #####
#####

Txt file name is /var/tmp/file1.txt
Txt file name is /var/tmp/testfile1.txt
Txt file name is /var/tmp/testfile2.txt
#####
##### FOR USAGE 3 #####
#####

Machine name is machine1:type1 which is of type machine1:type1
Machine name is machine2:type2 which is of type machine2:type2
Machine name is machine3:type1 which is of type machine3:type1
```

SSH

```
#!/bin/bash
echo ""
echo "#####"
echo "##### SSH KEYGEN #####"
echo "#####"
echo ""

ssh-keygen

echo ""
echo "#####"
echo "##### SSH KEY DISTRIBUTE #####"
echo "#####"
echo ""

echo "dev-host-02
dev-host-03" > nodes.txt
for node in $(cat nodes.txt)
do
    cat ~/.ssh/id_rsa.pub | ssh mpekmezci@$node "mkdir -p ~/.ssh && cat >> ~/.ssh/authorized_keys"
done

for node in $(cat nodes.txt)
do
    ssh mpekmezci@$node "hostname"
done
```

```
#####
##### SSH KEYGEN #####
#####
```

Generating public/private rsa key pair.
Enter file in which to save the key (/home/mpekmezci/.ssh/id_rsa):
/home/mpekmezci/.ssh/id_rsa already exists.
Overwrite (y/n)?

```
#####
##### SSH KEY DISTRIBUTE #####
#####
```

mpekmezci@dev-host-02's password:
mpekmezci@dev-host-03's password:
dev-host-02
dev-host-03

FIND AND REPLACE BATCH

```
#!/bin/bash
echo ""
echo "#####"
echo "##### FIND AND REPLACE #####"
echo "#####"
echo ""

find /var/tmp/eclipse/ -type f -name 'license.*'
echo ""
echo "#####"
echo ""
find /var/tmp/eclipse/ -type f -name 'license.*' | xargs grep equinox
echo ""
echo "#####"
echo ""
find /var/tmp/eclipse/ -type f -name 'license.*' | xargs grep equinox | cut -d: -f1 | sort|uniq
echo ""
echo "#####"
echo ""
file=$(find /var/tmp/eclipse/ -type f -name 'license.*' | xargs grep equinox | cut -d: -f1 | sort|uniq | head -1)
grep equinox $file
echo ""
echo "#####"
echo ""
i=0
for file in $(find /var/tmp/eclipse/ -type f -name 'license.*' | xargs grep equinox | cut -d: -f1 | sort|uniq)
do
    perl -pi -e "s/equinox/equinox$i/" $file
    ((i=i+1))
    grep equinox $file
done
```

```
#####
##### FIND AND REPLACE #####
#####
```

```
/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.core.feature_1.6.700.v20200813-0739/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.user.ui_2.4.900.v20200828-0839/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/license.html
```

```
#####
```

```
/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/repository_packaging.html</a>
/var/tmp/eclipse/org.eclipse.equinox.p2.core.feature_1.6.700.v20200813-0739/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/repository_packaging.html</a>
/var/tmp/eclipse/org.eclipse.equinox.p2.user.ui_2.4.900.v20200828-0839/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/repository_packaging.html</a>
/var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/repository_packaging.html</a>
/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/repository_packaging.html</a>
```

```
#####
```

```
/var/tmp/eclipse/org.eclipse.equinox.p2.core.feature_1.6.700.v20200813-0739/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.user.ui_2.4.900.v20200828-0839/license.html
```

```
#####
```

```
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
```

```
#####
```

```
href="http://eclipse.org/equinox0/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
href="http://eclipse.org/equinox1/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
href="http://eclipse.org/equinox2/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
href="http://eclipse.org/equinox3/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
href="http://eclipse.org/equinox4/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
```

GREP

```
#!/bin/bash
echo ""
echo "#####"
echo "##### GREP #####"
echo "#####"
echo ""

grep equinox /var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/
{*.properties,*.html} | head -2
echo ""
echo "#####"
echo ""

grep -A2 equinox /var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/*.xml | tail
-4
echo ""
echo "#####"
echo ""

grep -R equinox /var/tmp/eclipse/ | head -2
echo ""
echo "#####"
echo ""

grep -R equinox /var/tmp/eclipse/ | tail -2
echo ""
echo "#####"
echo ""

grep -R equinox /var/tmp/eclipse/ | grep -v xml | tail -2
echo ""
echo "#####"
echo ""

grep -R 'id="warranty"\|featureName=.*support' /var/tmp/eclipse/ | head -3
echo ""
echo "#####"
echo ""
```

```
#####
##### GREP #####
#####

/var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/feature.properties:http://eclipse.org/
equinox/p2/repository_packaging.html ("Specification").\n\
/var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/license.html:
href="http://eclipse.org/equinox3/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>

#####

--
    id="org.eclipse.equinox.p2.ui.sdk"
    download-size="51"
    install-size="92"

#####

/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/feature.properties:http://
eclipse.org/equinox/p2/repository_packaging.html ("Specification").\n\
/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/feature.xml:
id="org.eclipse.equinox.p2.discovery.feature"

#####

/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/feature.xml:
id="org.eclipse.equinox.p2.publisher.eclipse"
/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/license.html:
href="http://eclipse.org/equinox2/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>

#####

/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/feature.properties:http://eclipse.org/
equinox/p2/repository_packaging.html ("Specification").\n\
/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/license.html:
href="http://eclipse.org/equinox2/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>

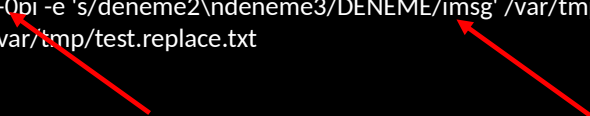
#####

/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/
feature.properties:featureName=Equinox p2, Discovery UI support
/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/epl-2.0.html:  <h2 id="warranty">5.
NO WARRANTY</h2>
/var/tmp/eclipse/org.eclipse.equinox.p2.core.feature_1.6.700.v20200813-0739/epl-2.0.html:  <h2 id="warranty">5. NO
WARRANTY</h2>
#####
```

MUTILINE PERL REPLACE

```
#!/bin/bash
echo ""
echo "#####"
echo "##### PERL MUTLILINE REPLACEMENT #####"
echo "#####"
echo ""

echo "deneme1
deneme2
deneme3
deneme4
deneme5" >/var/tmp/test.replace.txt
cat /var/tmp/test.replace.txt
echo ""
echo "#####"
echo ""
perl -0pi -e 's/deneme2\ndeneme3/DENEME/img' /var/tmp/test.replace.txt
cat /var/tmp/test.replace.txt
```



```
#####
##### PERL MUTLILINE REPLACEMENT #####
#####
```

```
deneme1
deneme2
deneme3
deneme4
deneme5
```

```
#####
```

```
deneme1
DENEME
deneme4
deneme5
```

STRCAT / HISTORY / PS / PGREP / UNAME / HOSTNAME

```
#!/bin/bash
echo ""
echo "#####"
echo "##### STRING CONCAT #####"
echo "#####"
echo ""

echo STR1=""
echo "red green blue" > colors.txt
for i in $(cat colors.txt); do if [ "$i" != "green" ]; then STR1="$STR1 $i";fi; done
echo $STR1

echo ""
echo "#####"
echo "##### HISTORY #####"
echo "#####"
echo ""

history | tail -5

echo ""
echo "#####"
echo "##### PS -EF vs pgrep -lfU #####"
echo "#####"
echo ""

pgrep -lfU mpekmezci
echo ""
echo "#####"
echo ""
ps -ef | grep mpek | tail -3

echo ""
echo "#####"
echo "##### UNAME #####"
echo "#####"
echo ""
uname -a

echo ""
echo "#####"
echo "##### HOSTNAME #####"
echo "#####"
echo ""
hostname
```

```
#####
##### STRING CONCAT #####
#####
```

STR1=
red blue

```
#####
##### HISTORY #####
#####
```

```
#####
##### PS -EF vs pgrep -lfU #####
#####
```

```
477665 sshd
477672 bash
477735 sshd
477741 sftp-server
513236 10.strcat.tail.
1780322 systemd
1780333 (sd-pam)
1780411 dbus-daemon
```

```
#####
```

```
mpekmez+ 1780322 1 0 Jan23 ? 00:00:01 /usr/lib/systemd/systemd --user
mpekmez+ 1780333 1780322 0 Jan23 ? 00:00:00 (sd-pam)
mpekmez+ 1780411 1780322 0 Jan23 ? 00:00:00 /usr/bin/dbus-daemon --session --address=systemd: --
nofork --nopidfile --systemd-activation --syslog-only
```

```
#####
##### UNAME #####
#####
```

```
Linux dev-host-01 4.18.0-193.el8.x86_64 #1 SMP Fri May 8 10:59:10 UTC 2020 x86_64 x86_64 x86_64
GNU/Linux
```

```
#####
##### HOSTNAME #####
#####
```

dev-host-01

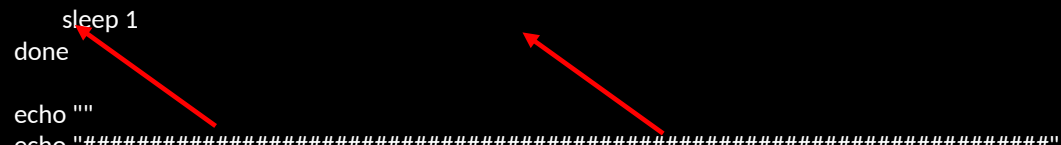
WAIT / SLEEP

```
#!/bin/bash
echo ""
echo "#####"
echo "##### SLEEP #####"
echo "#####"
echo ""

RUNNING=true
while($RUNNING)
do
    date
    SECONDS=$(date +%S)
    if [ "$SECONDS" -gt 30 ]
    then
        RUNNING=false
    fi
    sleep 1
done

echo ""
echo "#####"
echo "##### WAIT #####"
echo "#####"
echo ""

(for ((i=0;i<5;i=i+1));do echo "A.$i"; sleep 1; done) &
(for ((i=0;i<5;i=i+1));do echo "B.$i"; sleep 1; done) &
wait
(for ((i=0;i<5;i=i+1));do echo "C.$i";done) &
```



```
#####
##### SLEEP #####
#####

Mon May 23 14:23:04 +03 2022
Mon May 23 14:23:05 +03 2022
Mon May 23 14:23:06 +03 2022
Mon May 23 14:23:07 +03 2022
Mon May 23 14:23:08 +03 2022
Mon May 23 14:23:09 +03 2022
Mon May 23 14:23:10 +03 2022
Mon May 23 14:23:11 +03 2022
Mon May 23 14:23:12 +03 2022
Mon May 23 14:23:13 +03 2022
Mon May 23 14:23:14 +03 2022
Mon May 23 14:23:15 +03 2022
Mon May 23 14:23:16 +03 2022
Mon May 23 14:23:17 +03 2022
Mon May 23 14:23:18 +03 2022
Mon May 23 14:23:19 +03 2022
Mon May 23 14:23:20 +03 2022
Mon May 23 14:23:21 +03 2022
Mon May 23 14:23:22 +03 2022
Mon May 23 14:23:23 +03 2022
Mon May 23 14:23:24 +03 2022
Mon May 23 14:23:25 +03 2022
Mon May 23 14:23:26 +03 2022
Mon May 23 14:23:27 +03 2022
Mon May 23 14:23:28 +03 2022
Mon May 23 14:23:29 +03 2022
Mon May 23 14:23:30 +03 2022
Mon May 23 14:23:31 +03 2022
```

```
#####
##### WAIT #####
#####
```

A.0
B.0
A.1
B.1
A.2
B.2
A.3
B.3
B.4
A.4
C.0
C.1
C.2
C.3
C.4

FIND BY DATE

```
#!/bin/bash
echo ""
echo "#####"
echo "##### FIND BY DATE #####"
echo "#####"
echo ""
```

```
date > /var/tmp/eclipse/file123
```

```
find /var/tmp/eclipse -mmin -10
```

```
# -10 -> son 10 dakika icinde degisen
# +10 -> 10 dakika oncesine git, u tarihten once desigenleri getir
# Yani -10 olarak yazilan arama ile gelen sonuclarin tam tersini getirir.
# 10 -> degisme tarihi tam 10. dakikada olanlari getir.
```

```
#####
##### FIND BY DATE #####
#####
```

```
/var/tmp/eclipse/file123
```


ARRAY MENU

```
#!/bin/bash
echo ""
echo "#####"
echo "##### ARRAY MENU #####"
echo "#####"
echo ""

echo "red green blue" > colors.txt
for i in $(cat colors.txt); do echo $i; done
color_array=($(cat colors.txt))
for((i=0;i<${#color_array[@]};i=i+1)); do echo "$i. ${color_array[$i]}"; done
read -p "Select a color (0-2) : " selection
echo "You selected ${color_array[$selection]}"
```

```
#####
##### ARRAY MENU #####
#####

red
green
blue
0. red
1. green
2. blue
Select a color (0-2) : 2
You selected blue
```

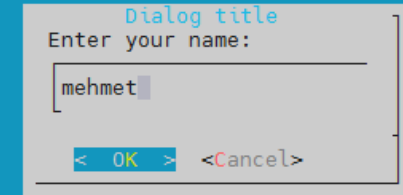
DIALOG

```
#!/bin/bash
echo ""
echo "#####"
echo "##### DIALOG #####"
echo "#####"
echo ""

value1=$(dialog --stdout --title "Dialog title" --inputbox "Enter your name:" 0 0)
dialog --stdout --default-button "no" --no-label "I don't want to format" --yes-label "I want to format" --
yesno "Do you really want to format the partition?" 0 0
value2=$?
value3=$(dialog --stdout --checklist "Select items:" 0 0 0 \
  1 "Choice number one" off \
  2 "Choice number two" on \
  3 "Choice number three" off)
value4=$(dialog --stdout --radiolist "Select items:" 0 0 0 \
  1 "Choice number one" Off \
  2 "Choice number two" on \
  3 "Choice number three" off)
value5=$( dialog --stdout --insecure --passwordbox "Enter your password:" 0 0 )
echo ""
echo "#####"
echo ""
echo "value1=$value1"
echo "value2=$value2"
echo "value3=$value3"
echo "value4=$value4"
echo "value5=$value5"
```

#####

```
value1=mehmet
value2=1
value3=1 2
value4=3
value5=secret123
```



Do you really want to format the partition?

< I want to format > <I don't want to format>

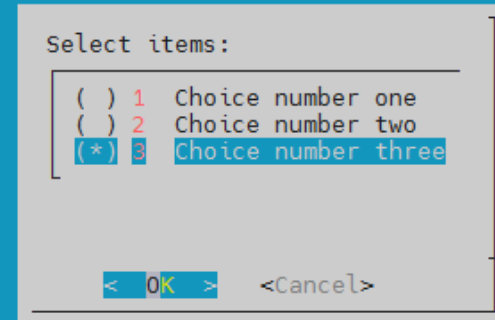
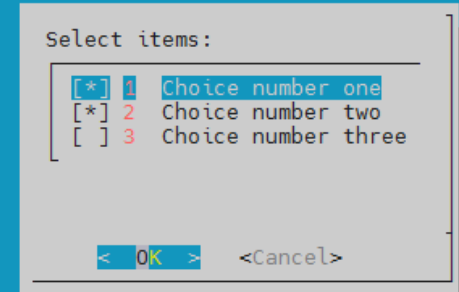
DIALOG

```
#!/bin/bash
echo ""
echo "#####"
echo "##### DIALOG #####"
echo "#####"
echo ""

value1=$(dialog --stdout --title "Dialog title" --inputbox "Enter your name:" 0 0)
dialog --stdout --default-button "no" --no-label "I don't want to format" --yes-label "I want to format" --
yesno "Do you really want to format the partition?" 0 0
value2=$?
value3=$(dialog --stdout --checklist "Select items:" 0 0 0 \
  1 "Choice number one" off \
  2 "Choice number two" on \
  3 "Choice number three" off)
value4=$(dialog --stdout --radiolist "Select items:" 0 0 0 \
  1 "Choice number one" Off \
  2 "Choice number two" on \
  3 "Choice number three" off)
value5=$( dialog --stdout --insecure --passwordbox "Enter your password:" 0 0 )
echo ""
echo "#####"
echo ""
echo "value1=$value1"
echo "value2=$value2"
echo "value3=$value3"
echo "value4=$value4"
echo "value5=$value5"
```

#####

```
value1=mehmet
value2=1
value3=1 2
value4=3
value5=secret123
```



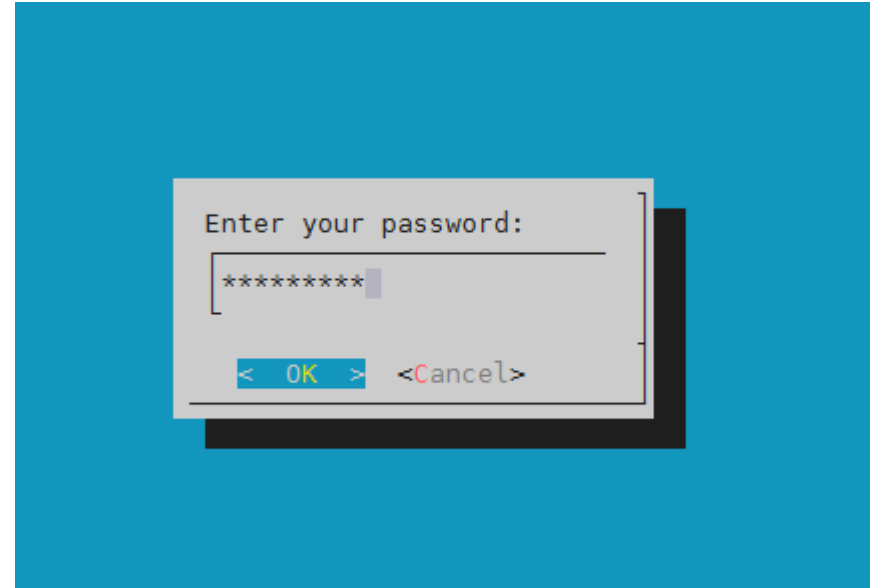
DIALOG

```
#!/bin/bash
echo ""
echo "#####"
echo "##### DIALOG #####"
echo "#####"
echo ""

value1=$(dialog --stdout --title "Dialog title" --inputbox "Enter your name:" 0 0)
dialog --stdout --default-button "no" --no-label "I don't want to format" --yes-label "I want to format" --
yesno "Do you really want to format the partition?" 0 0
value2=$?
value3=$(dialog --stdout --checklist "Select items:" 0 0 0 \
  1 "Choice number one" off \
  2 "Choice number two" on \
  3 "Choice number three" off)
value4=$(dialog --stdout --radiolist "Select items:" 0 0 0 \
  1 "Choice number one" Off \
  2 "Choice number two" on \
  3 "Choice number three" off)
value5=$( dialog --stdout --insecure --passwordbox "Enter your password:" 0 0 )
echo ""
echo "#####"
echo ""
echo "value1=$value1"
echo "value2=$value2"
echo "value3=$value3"
echo "value4=$value4"
echo "value5=$value5"
```

```
#####
```

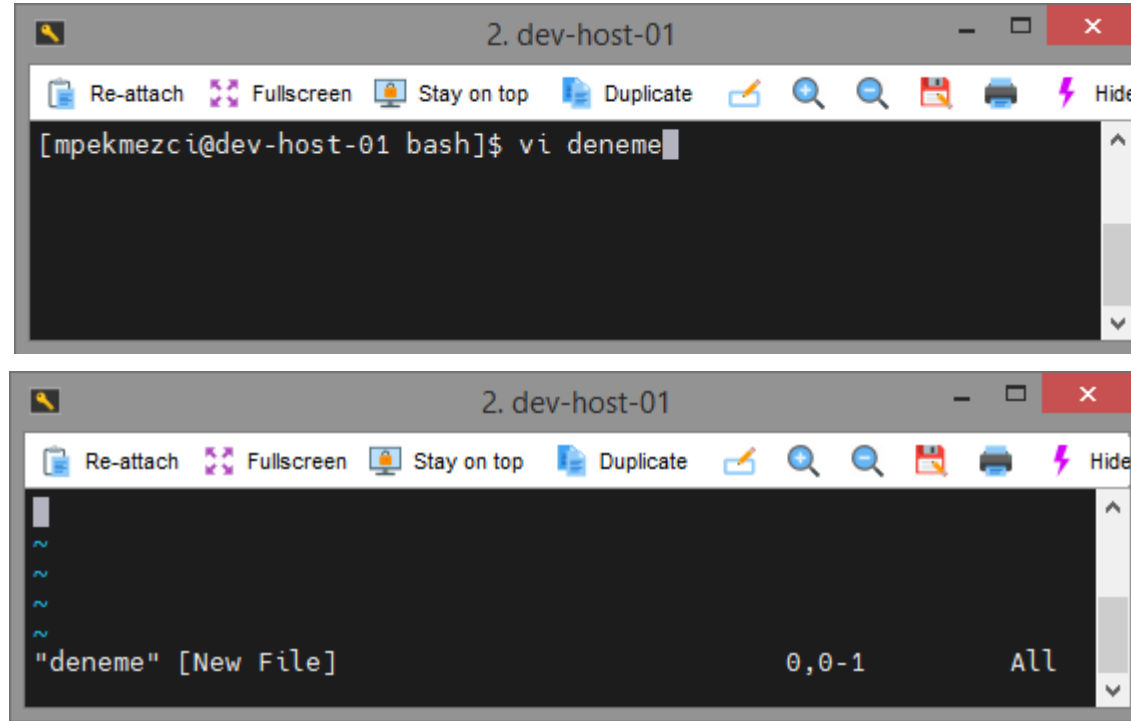
```
value1=mehmet
value2=1
value3=1 2
value4=3
value5=secret123
```



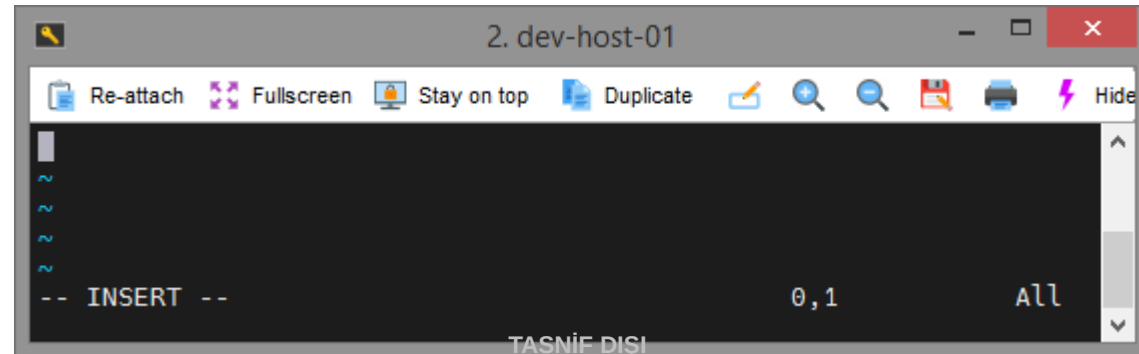
EDITORS

Vi
Mcedit

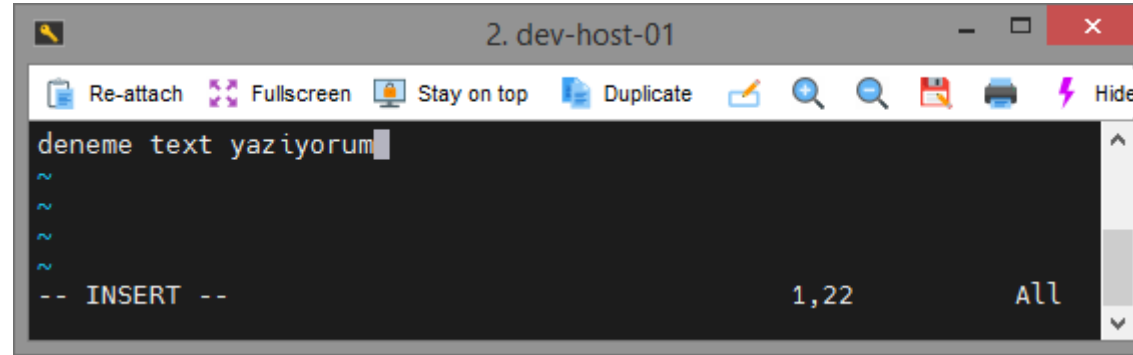
VI



Klavyede **i** tuşuna basınca, aşağıdaki gibi "insert" moda geçiyoruz, artık yazabiliriz.

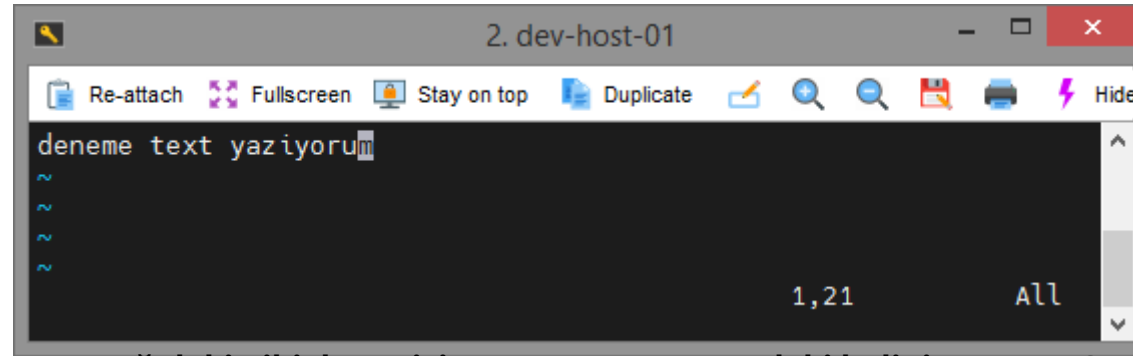


VI



```
deneme text yaziyorum
```

Klavede Esc tuşuna basınca, aşağıdaki gibi “Escape” moda geçiyoruz, artık yazamayız.



```
deneme text yaziyorum
```

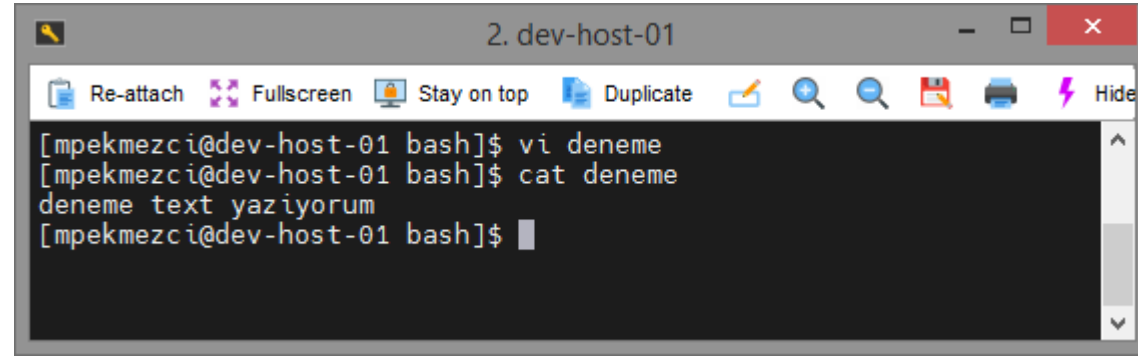
Klavede “:wq” yazınca, aşağıdaki gibi dosya içine mevcut memory’deki halini yazar. (NOT: “:” karakterini de bizim yazmamız gerekir, kendisi yazmaz.)



```
deneme text yaziyorum
```

```
:wq
```

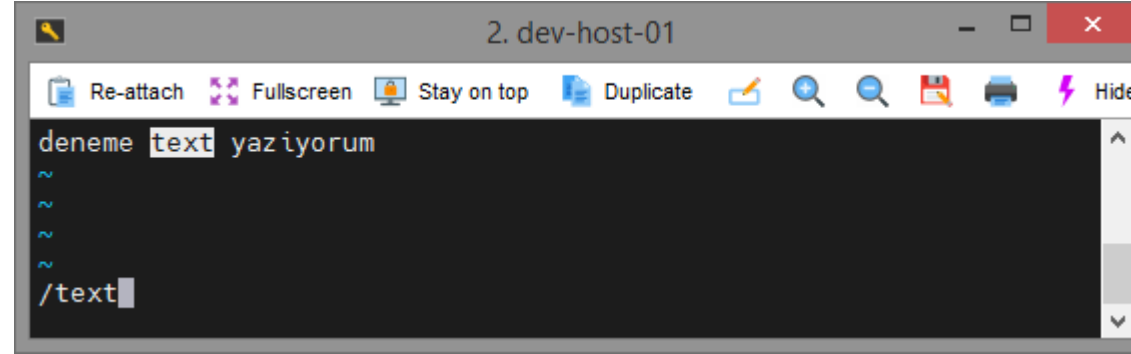
VI



```
[mpekmezci@dev-host-01 bash]$ vi deneme
[mpekmezci@dev-host-01 bash]$ cat deneme
deneme text yaziyorum
[mpekmezci@dev-host-01 bash]$
```

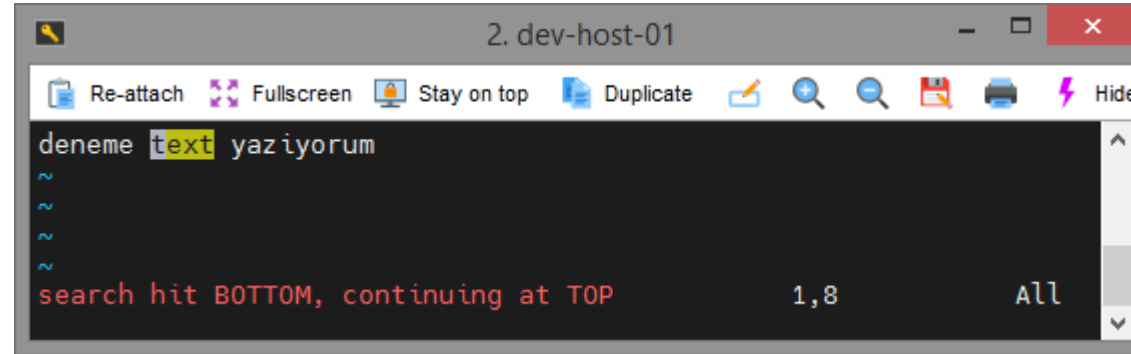

VI - SEARCH

Klavede **Esc** tuşuna bastıktan sonra, **"/text"** yazısını yazarsak, **"text"** kelimesini arar.



A screenshot of a terminal window titled "2. dev-host-01". The window contains a Vim editor interface. The first line of text is "deneme text yazıyorum". Below it, there are four lines of tilde (~) characters. At the bottom, the search command "/text" is entered, and the cursor is positioned at the end of the command.

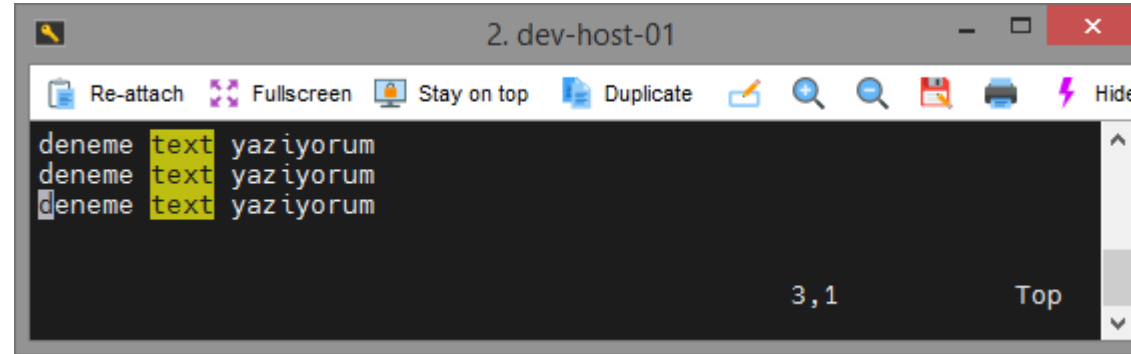
Klavede **"n"** tuşuna basarsak bir sonraki **"text"** yazısına gitmeye çalışır. (**n**'nin anlamı next'tir)



A screenshot of a terminal window titled "2. dev-host-01". The window contains a Vim editor interface. The first line of text is "deneme text yazıyorum". Below it, there are four lines of tilde (~) characters. At the bottom, the search command "/text" is entered, and the cursor is positioned at the end of the command. The text "search hit BOTTOM, continuing at TOP" is displayed in red, followed by "1,8" and "All".

VI – COPY – PASTE - DELETE

Klavede Esc tuşuna bastıktan sonra, kalavyede “yy” yazarsak, bulunduğu satırı kopyalar.



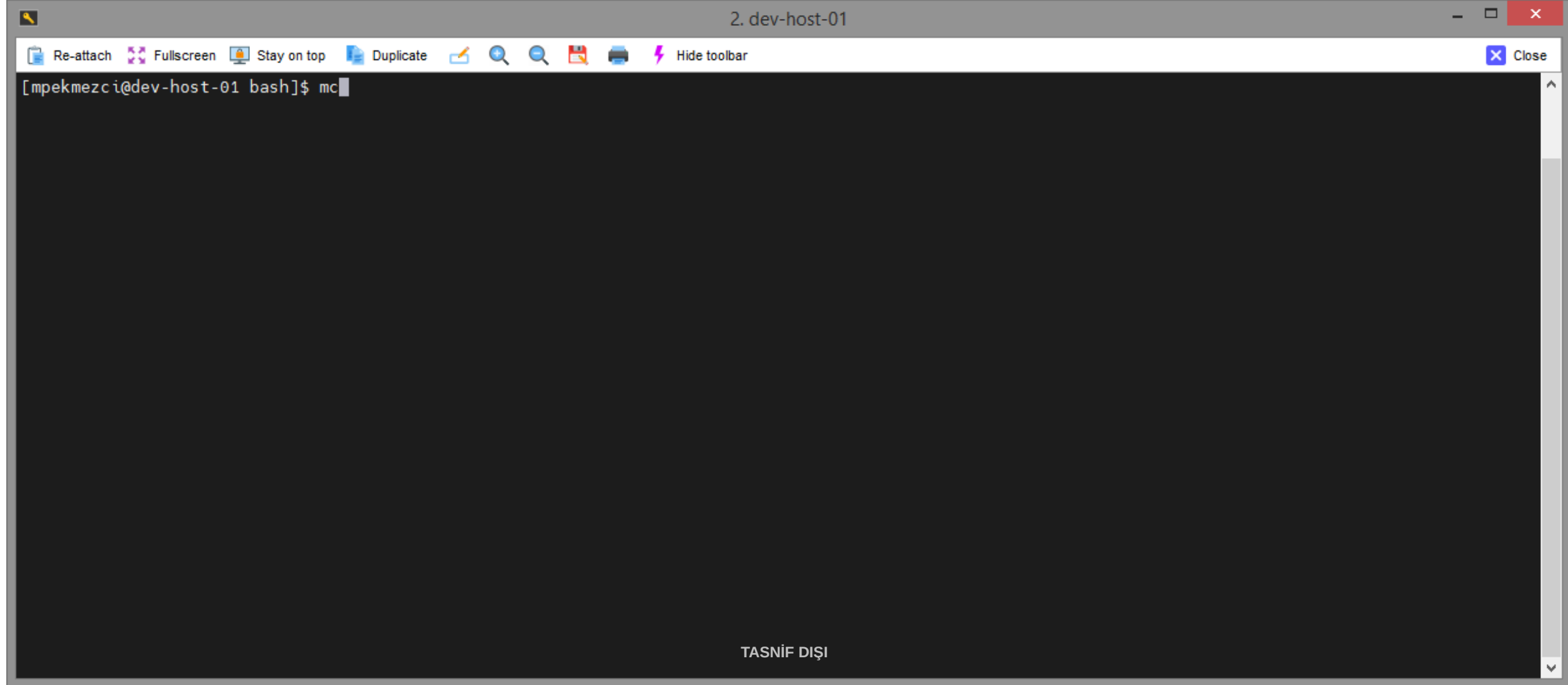
Klavede “p” tuşuna basarsak da ilgili satırı bir altına paste eder.

Benzer komutlar :

- Klavede “3yy” tuşuna basarsak , imlecin bulunduğu satır dahil 3 satırı kopyalar ve “p” ile bu 3 satırı paste eder.
- Klavede “dd” tuşuna basarsak , imlecin bulunduğu satırı siler.

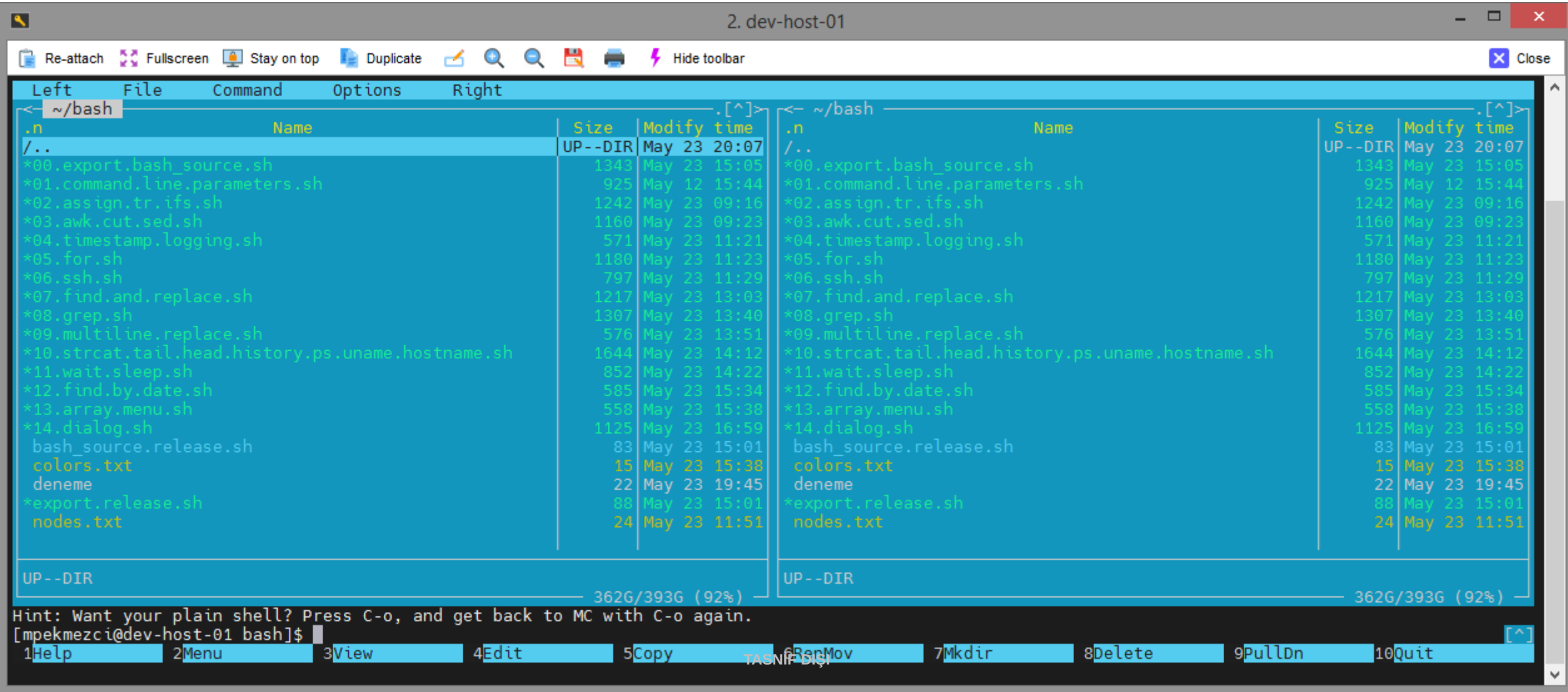
MC

mc (Midnight Commander) , komut satırında çalışan , dosyalar arasında gezinmeyi ve edit etmeyi çok kolaylaştıran bir uygulamadır.



MC

Program açılınca, aşağıdaki gibi sağ ve sol ekranlarında dosya ve dizinleri gezme imkanı vermektedir.



MC

F9 tuşuna basınca yukarıdaki menüye geçilir.

2. dev-host-01

Re-attach Fullscreen Stay on top Duplicate Hide toolbar Close

Left File Command Options Right

.n	Name	Size	Modify	time
/..	UP--DIR		May 23	20:07
*00.export.bash_source.sh		1343	May 23	15:05
*01.command.line.parameters.sh		925	May 12	15:44
*02.assign.tr.ifs.sh		1242	May 23	09:16
*03.awk.cut.sed.sh		1160	May 23	09:23
*04.timestamp.logging.sh		571	May 23	11:21
*05.for.sh		1180	May 23	11:23
*06.ssh.sh		797	May 23	11:29
*07.find.and.replace.sh		1217	May 23	13:03
*08.grep.sh		1307	May 23	13:40
*09.multiline.replace.sh		576	May 23	13:51
*10.strcat.tail.head.history.ps.uname.hostname.sh		1644	May 23	14:12
*11.wait.sleep.sh		852	May 23	14:22
*12.find.by.date.sh		585	May 23	15:34
*13.array.menu.sh		558	May 23	15:38
*14.dialog.sh		1125	May 23	16:59
bash_source.release.sh		83	May 23	15:01
colors.txt		15	May 23	15:38
deneme		22	May 23	19:45
*export.release.sh		88	May 23	15:01
nodes.txt		24	May 23	11:51

UP--DIR 362G/393G (92%)

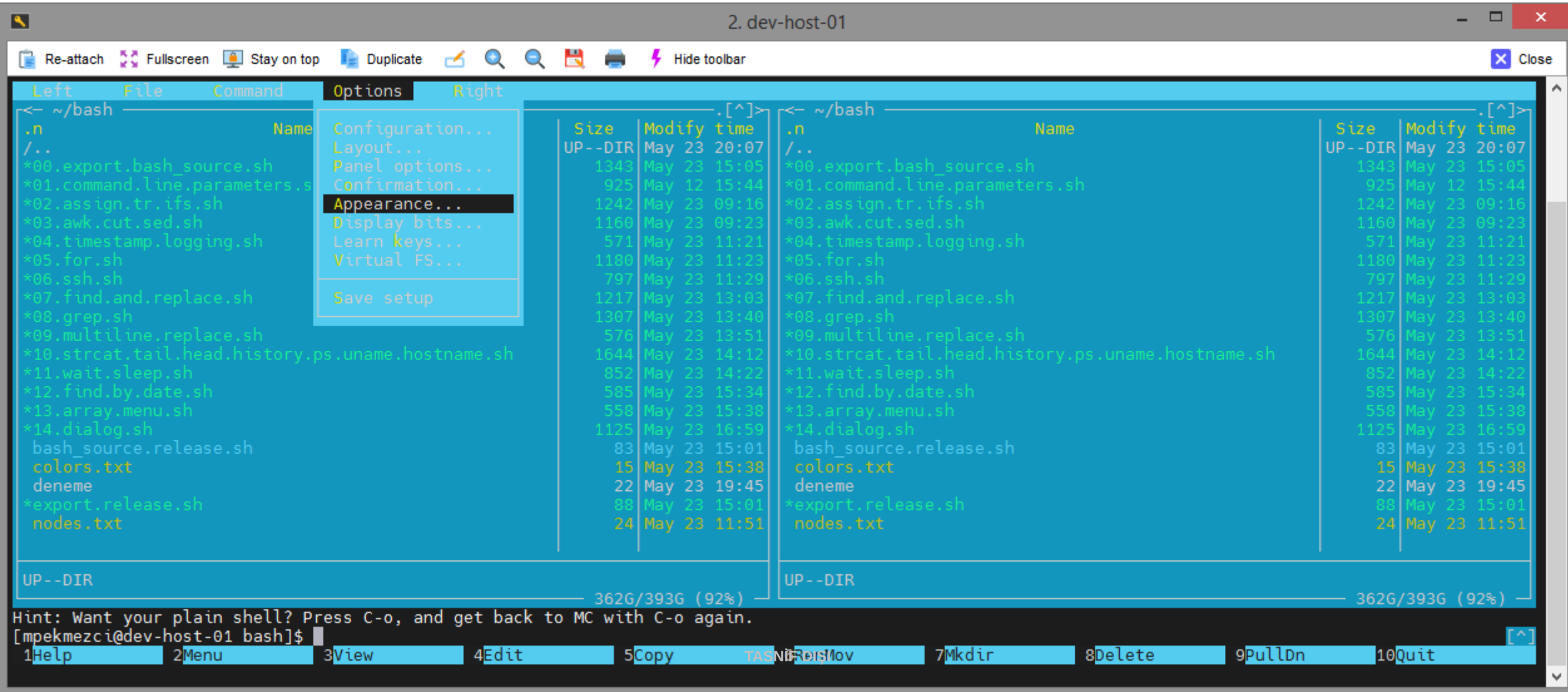
Hint: Want your plain shell? Press C-o, and get back to MC with C-o again.

[mpekmezci@dev-host-01 bash]\$

1Help 2Menu 3View 4Edit 5Copy 6RunMov 7Mkdir 8Delete 9PullDn 10Quit

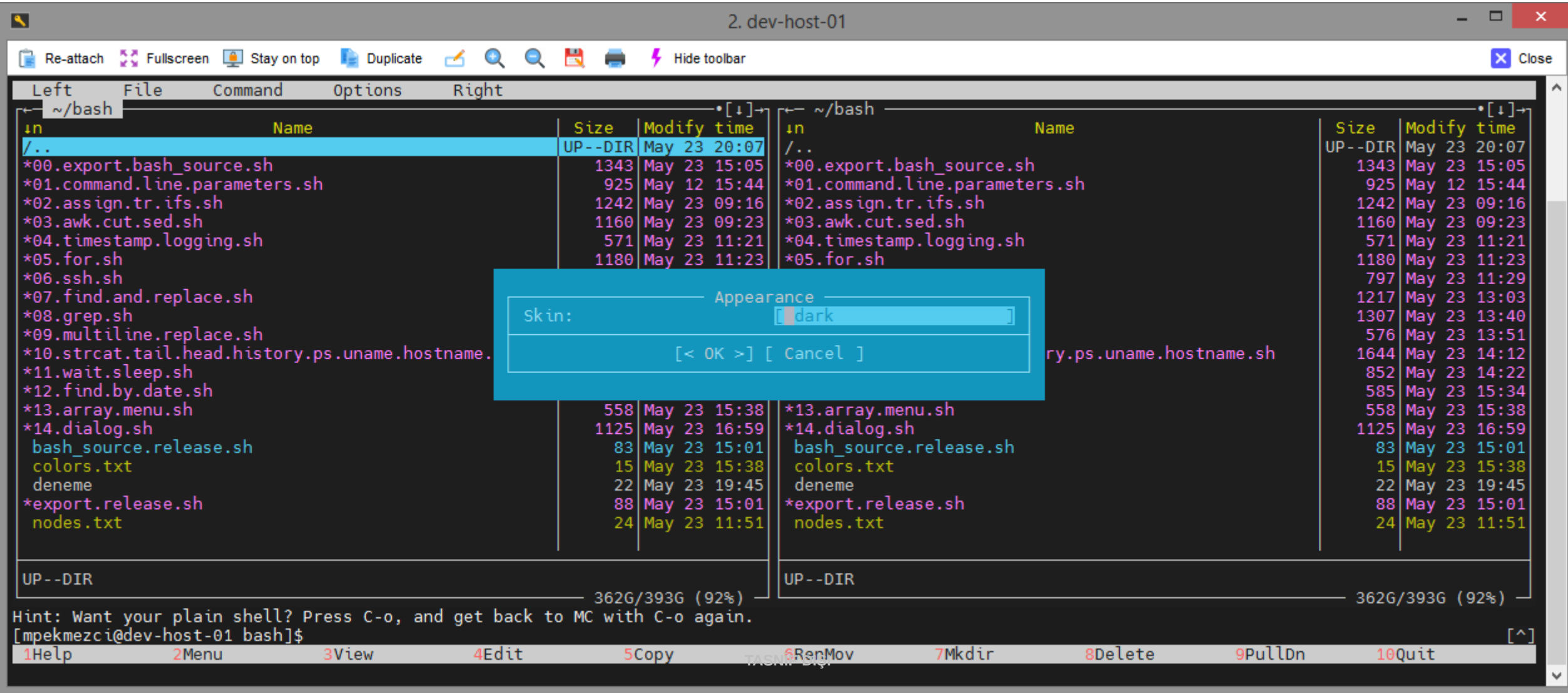
MC

Ok tuşları ile options > Appearance 'a gidilip görünüş değiştirilir.



MC

Seçim yapıldıktan sonra TAB ile "OK" butonun üstüne gelinir ve "Enter" tuşuna basılır.



MC

Layout menüsünde ekranın sağ/sol ayarları yapılır

The screenshot shows the MC (Minecraft) interface with the Layout menu open. The menu options are:

- Configuration...
- Layout...
- Panel options...
- Confirmation...
- Appearance...
- Display bits...
- Learn keys...
- Virtual FS...
- Save setup

The background shows a file manager with columns for Name, Size, Modify, and time. The interface is titled '2. dev-host-01' and includes a toolbar with icons for Re-attach, Fullscreen, Stay on top, Duplicate, and Hide toolbar.

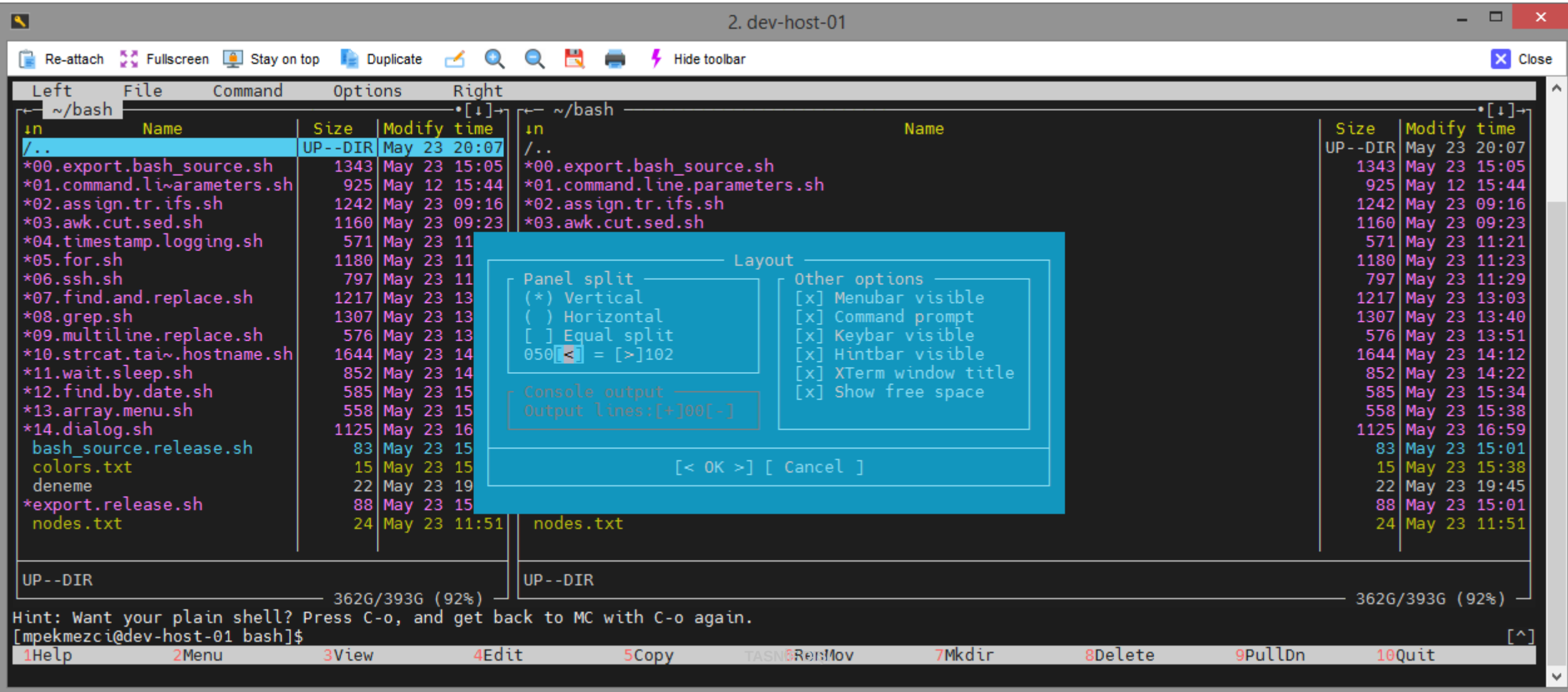
Hint: Want your plain shell? Press C-o, and get back to MC with C-o again.

[mpekmezci@dev-host-01 bash]\$

1Help 2Menu 3View 4Edit 5Copy 6RenMov 7Mkdir 8Delete 9PullDn 10Quit

MC

Layout menüsünde ekranın sağ/sol ayarları yapılır



The screenshot shows the MC (Minecraft) interface with the Layout menu open. The menu is divided into three sections: Panel split, Console output, and Other options. The background shows a file manager with a list of files and folders.

Layout Menu Options:

- Panel split
 - (*) Vertical
 - () Horizontal
 - [] Equal split
 - 050 [] = [] 102
- Console output
 - Output lines: [+] 00 [-]
- Other options
 - [x] Menubar visible
 - [x] Command prompt
 - [x] Keybar visible
 - [x] Hintbar visible
 - [x] XTerm window title
 - [x] Show free space

File Manager List:

Name	Size	Modify	time
UP--DIR		May 23	20:07
*00.export.bash_source.sh	1343	May 23	15:05
*01.command.line.parameters.sh	925	May 12	15:44
*02.assign.tr.ifs.sh	1242	May 23	09:16
*03.awk.cut.sed.sh	1160	May 23	09:23
*04.timestamp.logging.sh	571	May 23	11:21
*05.for.sh	1180	May 23	11:23
*06.ssh.sh	797	May 23	11:29
*07.find.and.replace.sh	1217	May 23	13:03
*08.grep.sh	1307	May 23	13:40
*09.multiline.replace.sh	576	May 23	13:51
*10.strcat.tail~.hostname.sh	1644	May 23	14:12
*11.wait.sleep.sh	852	May 23	14:22
*12.find.by.date.sh	585	May 23	15:34
*13.array.menu.sh	558	May 23	15:38
*14.dialog.sh	1125	May 23	16:59
bash_source.release.sh	83	May 23	15:01
colors.txt	15	May 23	15:38
deneme	22	May 23	19:45
*export.release.sh	88	May 23	15:01
nodes.txt	24	May 23	11:51

UP--DIR 362G/393G (92%)

Hint: Want your plain shell? Press C-o, and get back to MC with C-o again.
[mpekmezci@dev-host-01 bash]\$

1Help 2Menu 3View 4Edit 5Copy 6Paste 7Mkdir 8Delete 9PullDn 10Quit

MC

Yapılan ayarlar aşağıdaki gibi save edilir.

2. dev-host-01

Re-attach Fullscreen Stay on top Duplicate Hide toolbar Close

Left File Command Options Right

Configuration...
Layout...
Panel options...
Confirmation...
Appearance...
Display bits...
Learn keys...
Virtual FS...
Save setup

Name	Size	Modify time
UP -- DIR		May 23 20:07
*00.export.bash_source.sh	1343	May 23 15:05
*01.command.line.parameters.sh	925	May 12 15:44
*02.assign.tr.ifs.sh	1242	May 23 09:16
*03.awk.cut.sed.sh	1160	May 23 09:23
*04.timestamp.logging.sh	571	May 23 11:21
*05.for.sh	1180	May 23 11:23
*06.ssh.sh	797	May 23 11:29
*07.find.and.replace.sh	1217	May 23 13:03
*08.grep.sh	1307	May 23 13:40
*09.multiline.replace.sh	576	May 23 13:51
*10.strcat.tail.head.history.ps.uname.hostname.sh	1644	May 23 14:12
*11.wait.sleep.sh	852	May 23 14:22
*12.find.by.date.sh	585	May 23 15:34
*13.array.menu.sh	558	May 23 15:38
*14.dialog.sh	1125	May 23 16:59
bash_source.release.sh	83	May 23 15:01
colors.txt	15	May 23 15:38
deneme	22	May 23 19:45
*export.release.sh	88	May 23 15:01
nodes.txt	24	May 23 11:51

UP -- DIR 362G/393G (92%)

Hint: Want your plain shell? Press C-o, and get back to MC with C-o again.

[mpekmezci@dev-host-01 bash]\$

1Help 2Menu 3View 4Edit 5Copy 6RenMov 7Mkdir 8Delete 9PullDn 10Quit

MC

F9 > Right > Quick View seçilerek, soldaki dosyanın içeriğinin sağda görünmesi sağlanır.

2. dev-host-01

Re-attach Fullscreen Stay on top Duplicate Hide toolbar

Left File Command Options Right

~ / bash

Name	Size	Modif
UP -- DIR		May 2
*00.export.bash_source.sh	1343	May 2
*01.command.line.parameters.sh	925	May 1
*02.assign.tr.ifs.sh	1242	May 2
*03.awk.cut.sed.sh	1160	May 2
*04.timestamp.logging.sh	571	May 2
*05.for.sh	1180	May 2
*06.ssh.sh	797	May 2
*07.find.and.replace.sh	1217	May 2
*08.grep.sh	1307	May 2
*09.multiline.replace.sh	576	May 2
*10.strcat.tail.hostname.sh	1644	May 2
*11.wait.sleep.sh	852	May 2
*12.find.by.date.sh	585	May 2
*13.array.menu.sh	558	May 2
*14.dialog.sh	1125	May 2
bash_source.release.sh	83	May 23 15:01
colors.txt	15	May 23 15:38
deneme	22	May 23 19:45
*export.release.sh	88	May 23 15:01
nodes.txt	24	May 23 11:51

UP -- DIR

362G/393G (92%)

Hint: Tired of these messages? Turn them off from the Options/Layout menu.

[mpkmezci@dev-host-01 bash]\$

1Help 2Menu 3View 4Edit 5Copy 6RenMov 7Mkdir 8Delete 9PullDn 10Quit

TASNIF DIŞI

MC

F9 > Right > Quick View seçilerek, soldaki dosyanın içeriğinin sağda görünmesi sağlanır.

2. dev-host-01

Re-attach Fullscreen Stay on top Duplicate Hide toolbar

Left File Command Options Right

~ / bash

Name	Size	Modif
UP -- DIR		May 2
*00.export.bash_source.sh	1343	May 2
*01.command.line.parameters.sh	925	May 1
*02.assign.tr.ifs.sh	1242	May 2
*03.awk.cut.sed.sh	1160	May 2
*04.timestamp.logging.sh	571	May 2
*05.for.sh	1180	May 2
*06.ssh.sh	797	May 2
*07.find.and.replace.sh	1217	May 2
*08.grep.sh	1307	May 2
*09.multiline.replace.sh	576	May 2
*10.strcat.tail.hostname.sh	1644	May 2
*11.wait.sleep.sh	852	May 2
*12.find.by.date.sh	585	May 2
*13.array.menu.sh	558	May 2
*14.dialog.sh	1125	May 2
bash_source.release.sh	83	May 23 15:01
colors.txt	15	May 23 15:38
deneme	22	May 23 19:45
*export.release.sh	88	May 23 15:01
nodes.txt	24	May 23 11:51

UP -- DIR

362G/393G (92%)

Hint: Tired of these messages? Turn them off from the Options/Layout menu.

[mpkmezci@dev-host-01 bash]\$

1Help 2Menu 3View 4Edit 5Copy 6RenMov 7Mkdir 8Delete 9PullDn 10Quit

TASNIF DIŞI

MC

Ok tuşları ile sağ menüdeki bir dosya seçilip “F4” tuşuna basınca edit moduna geçilir (VI’den daha kolaydır ☺)

The screenshot shows the MC (Micro) editor interface. The window title is "2. dev-host-01". The top toolbar includes buttons for Re-attach, Fullscreen, Stay on top, Duplicate, and Hide toolbar. The interface is divided into two main panels: Left and Right.

Left Panel: Displays a file list with columns for Name, Size, and Modify time. The file `*03.awk.cut.sed.sh` is selected.

Name	Size	Modify time
<code>UP--DIR</code>		May 23 20:07
<code>*00.export.bash_source.sh</code>	1343	May 23 15:05
<code>*01.command.line.parameters.sh</code>	925	May 12 15:44
<code>*02.assign.tr.ifs.sh</code>	1242	May 23 09:16
<code>*03.awk.cut.sed.sh</code>	1160	May 23 09:23
<code>*04.timestamp.logging.sh</code>	571	May 23 11:21
<code>*05.for.sh</code>	1180	May 23 11:23
<code>*06.ssh.sh</code>	797	May 23 11:29
<code>*07.find.and.replace.sh</code>	1217	May 23 13:03
<code>*08.grep.sh</code>	1307	May 23 13:40
<code>*09.multiline.replace.sh</code>	576	May 23 13:51
<code>*10.strcat.tail.hostname.sh</code>	1644	May 23 14:12
<code>*11.wait.sleep.sh</code>	852	May 23 14:22
<code>*12.find.by.date.sh</code>	585	May 23 15:34
<code>*13.array.menu.sh</code>	558	May 23 15:38
<code>*14.dialog.sh</code>	1125	May 23 16:59
<code>bash_source.release.sh</code>	83	May 23 15:01
<code>colors.txt</code>	15	May 23 15:38
<code>deneme</code>	22	May 23 19:45
<code>*export.release.sh</code>	88	May 23 15:01
<code>nodes.txt</code>	24	May 23 11:51

Right Panel: Displays the content of the selected file `/home/mpekmezci/bash/03.awk.cut.sed.sh`. The file size is 694/1160 and it is 59% full.

```
#!/bin/bash
echo ""
echo "#####"
echo "##### AWK USAGE #####"
echo "#####"
echo ""

ls -l
echo ""
ls -l | awk '{print $1-"$9}'
echo ""
ls -l | grep -v total | awk '{print $1-"$9}'

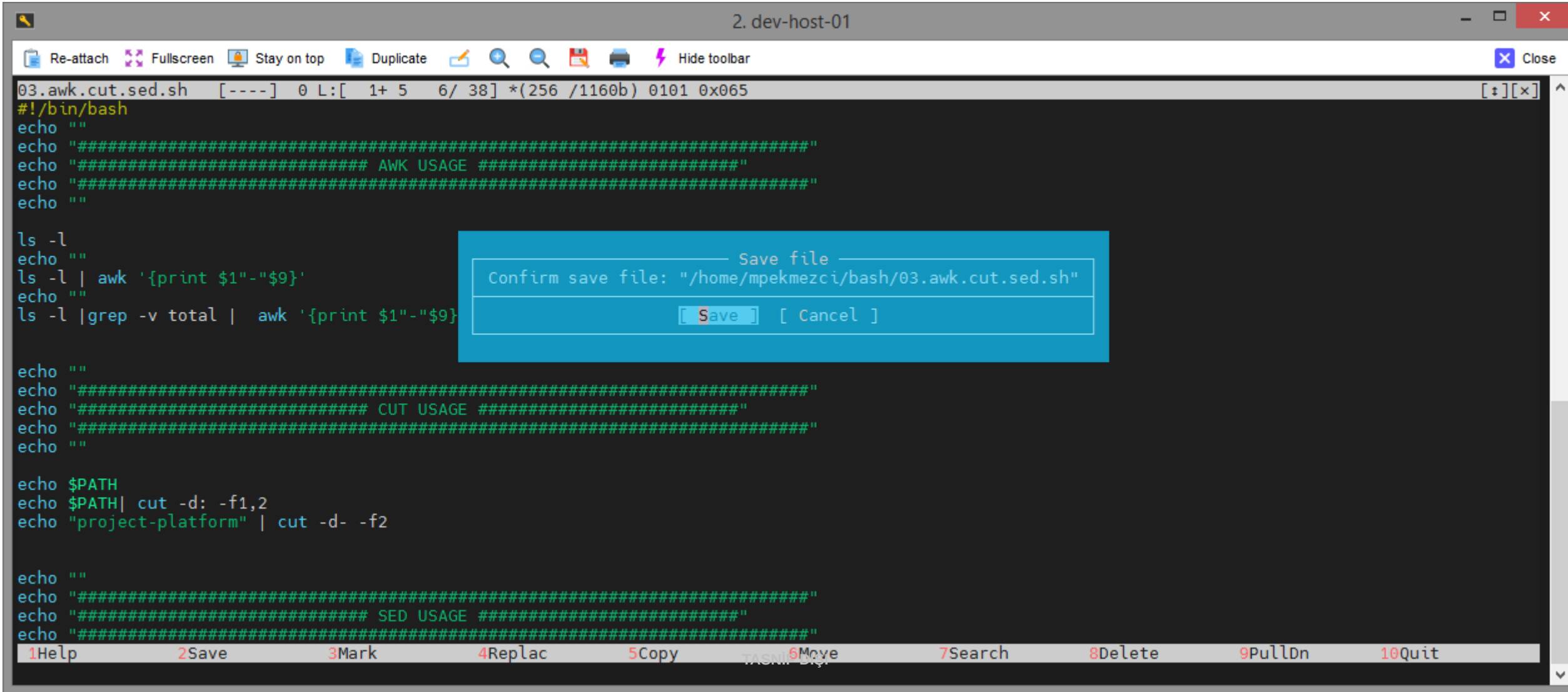
echo ""
echo "#####"
echo "##### CUT USAGE #####"
echo "#####"
echo ""

echo $PATH
echo $PATH | cut -d: -f1,2
echo "project-platform" | cut -d- -f2
```

At the bottom, there is a hint: "Hint: Tired of these messages? Turn them off from the Options/Layout menu." and a status bar with keyboard shortcuts: 1Help, 2Menu, 3View, 4Edit, 5Copy, 6RenMov, 7Mkdir, 8Delete, 9PullDn, 10Quit.

MC

Dosyada düzenlememizi yaptıktan sonra “F2” tuşu ile save ederiz, “F10” tuşu ile bir önceki slayttaki ekrana döneriz.



The screenshot shows a terminal window titled "2. dev-host-01" with a toolbar at the top containing icons for Re-attach, Fullscreen, Stay on top, Duplicate, and Hide toolbar. The terminal displays a script execution with the following commands and output:

```
03.awk.cut.sed.sh [----] 0 L:[ 1+ 5 6/ 38] *(256 /1160b) 0101 0x065
#!/bin/bash
echo ""
echo "#####"
echo "##### AWK USAGE #####"
echo "#####"
echo ""

ls -l
echo ""
ls -l | awk '{print $1-"$9}'
echo ""
ls -l |grep -v total | awk '{print $1-"$9}'

echo ""
echo "#####"
echo "##### CUT USAGE #####"
echo "#####"
echo ""

echo $PATH
echo $PATH| cut -d: -f1,2
echo "project-platform" | cut -d- -f2

echo ""
echo "#####"
echo "##### SED USAGE #####"
echo "#####"
```

A blue dialog box is overlaid on the terminal, titled "Save file", with the text "Confirm save file: "/home/mpekmezci/bash/03.awk.cut.sed.sh". It has two buttons: "Save" and "Cancel".

At the bottom of the terminal window, there is a status bar with the following text: "1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn 10Quit".

BASH

MAY 2022
PEKMEZCI

TASNİF DIŐI

CODES

- <https://github.com/mehmetpekmezci/GTU-ENG-346/tree/main/bash-codes>

TASNİF DIŞI

RULES

RULE #1:

Prepare a test environment before directly running on the real system.

RULE #2:

Test your commands and their outputs, then construct your script by using the commands you tested.

RULE #3:

Edit your script in a Linux editor or, in a code editor like VSCode or Notepad++ on windows.

TASNİF DIŞI

EXPORT VARIABLES / BASH_SOURCE

```
echo "#####"
echo "##### EXPORT #####"
echo ""

MYVAR="VALUE1"
echo "
echo "MYVAR variable in export.release.sh : -- $MYVAR --"
MYVAR="VALUE2"
export MYVAR
"> export.release.sh

chmod +x ./export.release.sh
./export.release.sh
echo "MYVAR variable in main script : $MYVAR"

echo "#####"

export MYVAR
echo "Now exporting MYVAR in main script"
./export.release.sh
echo "#####"

source ./export.release.sh
echo "MYVAR variable in main script : $MYVAR after sourcing export.release.sh"

echo ""
echo "#####"
echo "##### BASH_SOURCE #####"
echo "#####"
echo ""

echo "
CURRENT_DIR=$( cd "$( dirname "${BASH_SOURCE[0]}" )" && pwd )
export CURRENT_DIR
"> bash_source.release.sh

./bash_source.release.sh

echo "CURRENT_DIR variable in main script : $CURRENT_DIR after sourcing bash_source.release.sh"
```

TASNİF DIŞI

```
#####

##### EXPORT #####

MYVAR variable in export.release.sh : -- --
MYVAR variable in main script : VALUE1

Now exporting MYVAR in main script
MYVAR variable in export.release.sh : -- VALUE1 --

MYVAR variable in export.release.sh : -- VALUE1 --
MYVAR variable in main script : VALUE2 after sourcing export.release.sh

##### BASH_SOURCE #####

CURRENT_DIR variable in main script : /home/mpkmezci/bash after sourcing bash_source.release.sh
```

PARAMETERS / FUNCTIONS / IF / FIND

```
#!/bin/bash
SCRIPT_NAME="$0"

function print_usage_and_exit {
    tput setaf 1 ## RED
    tput bold
    echo "$1"
    echo "Usage: ${SCRIPT_NAME} <dir> <expression> [a|d|f|l] <depth>"
    tput sgr0
    exit 1
}

if [ $# -lt 2 ]
then
    print_usage_and_exit "Wrong number of parameters :'"
fi

DIR="$1"
EXPRESSION="$2"
TYPE="$3"
DEPTH="$4"

if [ ! -d $DIR ]; then print_usage_and_exit "Directory $DIR does not exist"; fi

if [ "$TYPE" != "" -a "$TYPE" != "a" -a "$TYPE" != "d" -a "$TYPE" != "f" -a "$TYPE" != "l" ]
then
    print_usage_and_exit "Type can only be one of the a,d,f,l or no-parameter "
fi

DEPTH_FIND_ARGUMENT=""
if [ "$DEPTH" != "" ]; then DEPTH_FIND_ARGUMENT="-maxdepth $DEPTH"; fi

TYPE_FIND_ARGUMENT=""
if [ "$TYPE" != "" ]; then TYPE_FIND_ARGUMENT="-type $TYPE"; fi

echo "find $DIR $DEPTH_FIND_ARGUMENT $TYPE_FIND_ARGUMENT -name $EXPRESSION"
find $DIR $DEPTH_FIND_ARGUMENT $TYPE_FIND_ARGUMENT -name "$EXPRESSION"
```

TASNİF DIŞI

```
[mpekmezci@dev-host-01 bash]$ chmod +x 01.command.line.parameters.sh
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ *
find /var/tmp/mpekmezci/ -name 01.command.line.parameters.sh
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*'
find /var/tmp/mpekmezci/ -name *
/var/tmp/mpekmezci/
/var/tmp/mpekmezci/dir1
/var/tmp/mpekmezci/dir1/file2
/var/tmp/mpekmezci/dir1/file1
/var/tmp/mpekmezci/link_to_dir1
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*' d
find /var/tmp/mpekmezci/ -type d -name *
/var/tmp/mpekmezci/
/var/tmp/mpekmezci/dir1
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*' d 1
find /var/tmp/mpekmezci/ -maxdepth 1 -type d -name *
/var/tmp/mpekmezci/
/var/tmp/mpekmezci/dir1
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*' l 1
find /var/tmp/mpekmezci/ -maxdepth 1 -type l -name *
/var/tmp/mpekmezci/link_to_dir1
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/
Wrong number of parameters :
Usage: ./01.command.line.parameters.sh <dir> <expression> [a|d|f|l] <depth>
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*' z
Type can only be one of the a,d,f,l or no-parameter
Usage: ./01.command.line.parameters.sh <dir> <expression> [a|d|f|l] <depth>
[mpekmezci@dev-host-01 bash]$ ./01.command.line.parameters.sh /var/tmp/mpekmezci/ '*'
Directory /var/tmp/mpekmezci/ does not exist
Usage: ./01.command.line.parameters.sh <dir> <expression> [a|d|f|l] <depth>
[mpekmezci@dev-host-01 bash]$
```

ASSIGN / TR / IFS

```
#!/bin/bash
echo "##### ASSIGN OUTPUT OF A COMMAND TO A VARIABLE #####"
echo "##### ASSIGN OUTPUT OF A COMMAND TO A VARIABLE #####"
echo ""
hostname
HOSTTYPE=$(hostname | cut -d -f1)
if [ "$HOSTTYPE" == "dev" ]
then
    echo "This is a development host"
fi

echo ""
echo "##### TR COMMAND USAGE #####"
echo "##### TR COMMAND USAGE #####"
echo ""

export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/opt/eclipse/lib:/opt/havelsan/lib
echo $LD_LIBRARY_PATH | tr ':' '\n' | grep havelsan

echo ""
echo "##### IFS VARIABLE USAGE #####"
echo "##### IFS VARIABLE USAGE #####"
echo ""

echo " word1 word1.1 word1.2
word2.1 word2.2 word2.3" > /var/tmp/file1.txt

for i in $(cat /var/tmp/file1.txt); do echo $i; done
OLDIFS=$IFS
IFS="
"
for i in $(cat /var/tmp/file1.txt); do echo $i; done
IFS=$OLDIFS
```

TASNİF DIŞI

```
##### ASSIGN OUTPUT OF A COMMAND TO A VARIABLE #####
##### ASSIGN OUTPUT OF A COMMAND TO A VARIABLE #####

dev-host-01
This is a development host

##### TR COMMAND USAGE #####
##### TR COMMAND USAGE #####

/opt/havelsan/jdk11/jdk-11.0.9/lib
/opt/havelsan/lib

##### IFS VARIABLE USAGE #####
##### IFS VARIABLE USAGE #####

word1
word1.1
word1.2
word2.1
word2.2
word2.3
word1 word1.1 word1.2
word2.1 word2.2 word2.3
```

AWK / CUT / SED

```
#!/bin/bash
echo ""
echo "#####"
echo "##### AWK USAGE #####"
echo "#####"
echo ""

ls -l
echo ""
ls -l | awk '{print $1"-"$9}'
echo ""
ls -l | grep -v total | awk '{print $1"-"$9}'

echo ""
echo "#####"
echo "##### CUT USAGE #####"
echo "#####"
echo ""

echo $PATH
echo $PATH | cut -d: -f1,2
echo "project-platform" | cut -d- -f2

echo ""
echo "#####"
echo "##### SED USAGE #####"
echo "#####"
echo ""

echo "mykey=myvalue"
echo "mykey=myvalue" | sed -e 's/./ /'
echo "mykey=myvalue" | sed -e 's/./ /'
echo "mykey=myvalue" > /var/tmp/temp1
cat /var/tmp/temp1 | sed -e 's/./ /' > /var/tmp/temp2
cat /var/tmp/temp2
```

```
#####
##### AWK USAGE #####
#####

total 12
-rwxr-xr-x. 1 mpekmezci admin 925 May 12 15:44 01.command.line.parameters.sh
-rwxr-xr-x. 1 mpekmezci admin 1242 May 23 09:16 02.assign.tr.ifs.sh
-rwxr-xr-x. 1 mpekmezci admin 1160 May 23 09:23 03.awk.cut.sed.sh

total-
-rwxr-xr-x-01.command.line.parameters.sh
-rwxr-xr-x-02.assign.tr.ifs.sh
-rwxr-xr-x-03.awk.cut.sed.sh

-rwxr-xr-x-01.command.line.parameters.sh
-rwxr-xr-x-02.assign.tr.ifs.sh
-rwxr-xr-x-03.awk.cut.sed.sh

#####
##### CUT USAGE #####
#####

/home/mpekmezci/.local/bin:/home/mpekmezci/bin:/opt/havelsan/jdk-11/jdk-11.0.9/bin:/opt/havelsan/
eclipse/opt/gradle/gradle-7.4.2/bin:/opt/eclipse/usr/local/bin:/usr/bin:/usr/local/sbin:/usr/sbin
/home/mpekmezci/.local/bin:/home/mpekmezci/bin
platform

#####
##### SED USAGE #####
#####

mykey=myvalue
myvalue
mykey:myvalue
mykey:myvalue
```

TIMESTAMP / LOGGING / STDOUT / STDERR

```
#!/bin/bash
echo ""
echo "#####"
echo "##### TIMESTAMP AND LOGGING USAGE #####"
echo "#####"
echo ""

TIMESTAMP=$(date +%Y%m%d%H%M%S)
echo $TIMESTAMP
(
hostname
) >& /var/tmp/mylog.$TIMESTAMP

(
hostname
) 1> /var/tmp/stdout.log.$TIMESTAMP

(
hostname1
) 2> /var/tmp/stderr.log.$TIMESTAMP

for i in /var/tmp/.$TIMESTAMP; do echo ""; echo ""; echo "File :$i";echo "Content:"; cat $i; done
```

```
#####
##### TIMESTAMP AND LOGGING USAGE #####
#####

20220523112127

File :/var/tmp/mylog.20220523112127
Content:
dev-host-01

File :/var/tmp/stderr.log.20220523112127
Content:
./04.timestamp.logging.for.sh: line 19: hostname1: command not found

File :/var/tmp/stdout.log.20220523112127
Content:
dev-host-01
```

TASNİF DIŞI

FOR

```
#!/bin/bash
echo ""
echo "#####"
echo "##### FOR USAGE 1 #####"
echo "#####"
echo ""

MAX=4
for((i=0;i<MAX;i+=1)); do echo $i; done

echo ""
echo "#####"
echo "##### FOR USAGE 2 #####"
echo "#####"
echo ""
touch /var/tmp/testfile1.txt /var/tmp/testfile2.txt
for myfile in /var/tmp/*.txt
do
    echo "Txt file name is $myfile"
done

echo "#####"
echo "##### FOR USAGE 3 #####"
echo "#####"
echo ""

echo "machine1:type1
machine2:type2
machine3:type1" > nodes.txt
for line in $(cat nodes.txt)
do
    machine=$(echo $line | cut -d# -f1)
    mtype=$(echo $line | cut -d# -f2)
    echo "Machine name is $machine which is of type $mtype "
done
```

```
#####
##### FOR USAGE 1 #####
#####

0
1
2
3

#####
##### FOR USAGE 2 #####
#####

Txt file name is /var/tmp/file1.txt
Txt file name is /var/tmp/testfile1.txt
Txt file name is /var/tmp/testfile2.txt
#####
##### FOR USAGE 3 #####
#####

Machine name is machine1:type1 which is of type machine1:type1
Machine name is machine2:type2 which is of type machine2:type2
Machine name is machine3:type1 which is of type machine3:type1
```

TASNİF DIŞI

SSH

```
#!/bin/bash
echo ""
echo "#####"
echo "##### SSH KEYGEN #####"
echo "#####"
echo ""

ssh-keygen

echo ""
echo "#####"
echo "##### SSH KEY DISTRIBUTE #####"
echo "#####"
echo ""

echo "dev-host-02"
dev-host-03 > nodes.txt
for node in $(cat nodes.txt)
do
    cat ~/.ssh/id_rsa.pub | ssh mpekmezci@$node "mkdir -p ~/.ssh && cat >> ~/.ssh/authorized_keys"
done

for node in $(cat nodes.txt)
do
    ssh mpekmezci@$node "hostname"
done
```

```
#####
##### SSH KEYGEN #####
#####

Generating public/private rsa key pair.
Enter file in which to save the key (/home/mpekmezci/.ssh/id_rsa):
/home/mpekmezci/.ssh/id_rsa already exists.
Overwrite (y/n)?

#####
##### SSH KEY DISTRIBUTE #####
#####

mpekmezci@dev-host-02's password:
mpekmezci@dev-host-03's password:
dev-host-02
dev-host-03
```

TASNİF DIŞI

FIND AND REPLACE BATCH

```
#!/bin/bash
echo ""
echo "##### FIND AND REPLACE #####"
echo ""
echo ""

find /var/tmp/eclipse/ -type f -name "license.*"
echo ""
echo "#####"
echo ""
find /var/tmp/eclipse/ -type f -name "license.*" | xargs grep equinox
echo ""
echo "#####"
echo ""
find /var/tmp/eclipse/ -type f -name "license.*" | xargs grep equinox | cut -d: -f1 | sort | uniq
echo ""
echo "#####"
echo ""
files=$(find /var/tmp/eclipse/ -type f -name "license.*" | xargs grep equinox | cut -d: -f1 | sort | uniq | head -1)
grep equinox $file
echo ""
echo "#####"
echo ""
i=0
for file in $(find /var/tmp/eclipse/ -type f -name "license.*" | xargs grep equinox | cut -d: -f1 | sort | uniq)
do
    perl -pi -e 's/equinox/equinox1/' $file
    ((i+=1))
    grep equinox $file
done
```

TASNİF DIŞI

```
##### FIND AND REPLACE #####
#####

/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.core.feature_1.6.700.v20200813-0739/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.user.ui_2.4.900.v20200828-0839/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/license.html

#####

/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/repository_packaging.html</a>
/var/tmp/eclipse/org.eclipse.equinox.p2.core.feature_1.6.700.v20200813-0739/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/repository_packaging.html</a>
/var/tmp/eclipse/org.eclipse.equinox.p2.user.ui_2.4.900.v20200828-0839/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/repository_packaging.html</a>
/var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/repository_packaging.html</a>
/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/repository_packaging.html</a>

#####

/var/tmp/eclipse/org.eclipse.equinox.p2.core.feature_1.6.700.v20200813-0739/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/license.html
/var/tmp/eclipse/org.eclipse.equinox.p2.user.ui_2.4.900.v20200828-0839/license.html

#####

href="http://eclipse.org/equinox/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>

#####

href="http://eclipse.org/equinox0/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
href="http://eclipse.org/equinox1/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
href="http://eclipse.org/equinox2/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
href="http://eclipse.org/equinox3/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
href="http://eclipse.org/equinox4/p2/repository_packaging.html">http://eclipse.org/equinox/p2/
repository_packaging.html</a>
```

GREP

```
#!/bin/bash
echo ""
echo "#####"
echo "##### GREP #####"
echo "#####"
echo ""

grep equinox /var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/
["_properties", ".html"] | head -2
echo ""
echo "#####"
echo ""

grep -A2 equinox /var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/" | tail
-4
echo ""
echo "#####"
echo ""

grep -R equinox /var/tmp/eclipse/ | head -2
echo ""
echo "#####"
echo ""

grep -R equinox /var/tmp/eclipse/ | tail -2
echo ""
echo "#####"
echo ""

grep -R equinox /var/tmp/eclipse/ | grep -v xml | tail -2
echo ""
echo "#####"
echo ""

grep -R "id=\"warranty\"" | featureNames="support" /var/tmp/eclipse/ | head -3
echo ""
echo "#####"
echo ""
```

```
##### GREP #####
#####

/var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/feature.properties:http://eclipse.org/
equinox/p2/repository_packaging.html ("Specification")\n\
/var/tmp/eclipse/org.eclipse.equinox.p2.rcp.feature_1.4.900.v20200813-0739/license.html:
href="http://eclipse.org/equinox/p2/repository_packaging.html"~http://eclipse.org/equinox/p2/
repository_packaging.html</a>

#####

--
id="org.eclipse.equinox.p2.ui.sdk"
download-size="51"
install-size="92"

#####

/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/feature.properties:http://
eclipse.org/equinox/p2/repository_packaging.html ("Specification")\n\
/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/feature.xml:
id="org.eclipse.equinox.p2.discovery.feature"

#####

/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/feature.xml:
id="org.eclipse.equinox.p2.publisher.eclipse"
/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/license.html:
href="http://eclipse.org/equinox2/p2/repository_packaging.html"~http://eclipse.org/equinox/p2/
repository_packaging.html</a>

#####

/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/feature.properties:http://eclipse.org/
equinox/p2/repository_packaging.html ("Specification")\n\
/var/tmp/eclipse/org.eclipse.equinox.p2.extras.feature_1.4.900.v20200828-0839/license.html:
href="http://eclipse.org/equinox2/p2/repository_packaging.html"~http://eclipse.org/equinox/p2/
repository_packaging.html</a>

#####

/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/
feature.properties:featureName=Equinox p2. Discovery UI support
/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/epl-2.0.html: <h2 id="warranty">5.
NO WARRANTY</h2>
/var/tmp/eclipse/org.eclipse.equinox.p2.core.feature_1.6.700.v20200813-0739/epl-2.0.html: <h2 id="warranty">5. NO
WARRANTY</h2>

#####
```

TASNİF

MUTILINE PERL REPLACE

```
#!/bin/bash
echo ""
echo "#####"
echo "##### PERL MUTILINE REPLACEMENT #####"
echo "#####"
echo ""

deneme1
deneme2
deneme3
deneme4
deneme5" >/var/tmp/test.replace.txt
cat /var/tmp/test.replace.txt
echo ""
echo "#####"
echo ""
perl -0gl -e 's/deneme2\ndeneme3/DENEME/imsg' /var/tmp/test.replace.txt
cat /var/tmp/test.replace.txt
```

```
#####
##### PERL MUTILINE REPLACEMENT #####
#####

deneme1
deneme2
deneme3
deneme4
deneme5

#####

deneme1
DENEME
deneme4
deneme5
```

TASNİF DIŞI

STRCAT / HISTORY / PS / PGREP / UNAME / HOSTNAME

```
#!/bin/bash
echo ""
echo "##### STRING CONCAT #####"
echo "##### STRING CONCAT #####"
echo ""
echo STR1=""
echo "red green blue" > colors.txt
for i in $(cat colors.txt); do if [ "$i" != "green" ]; then STR1="$STR1 $i"; fi; done
echo $STR1

echo ""
echo "##### HISTORY #####"
echo "##### HISTORY #####"
echo ""

history | tail -5

echo ""
echo "##### PS -EF vs pgrep -fU #####"
echo "##### PS -EF vs pgrep -fU #####"
echo ""

pgrep -fU mpekmezci
echo ""
echo "##### UNAME #####"
echo "##### UNAME #####"
echo ""
uname -a

echo ""
echo "##### HOSTNAME #####"
echo "##### HOSTNAME #####"
echo ""
hostname
```

```
##### STRING CONCAT #####
##### STRING CONCAT #####

STR1=
red blue

##### HISTORY #####
##### HISTORY #####

##### PS -EF vs pgrep -fU #####
##### PS -EF vs pgrep -fU #####

477665 sshd
477672 bash
477735 sshd
477741 sftp-server
513236 10.strcat.tail
1780322 systemd
1780333 (sd-pam)
1780411 dbus-daemon

#####
mpekmezci 1780322 1 0 Jan23 ? 00:00:01 /usr/lib/systemd/systemd --user
mpekmezci 1780333 1780322 0 Jan23 ? 00:00:00 (sd-pam)
mpekmezci 1780411 1780322 0 Jan23 ? 00:00:00 /usr/bin/dbus-daemon --session --address=systemd: --
nofork --pidfile --systemd-activation --syslog-only

##### UNAME #####
##### UNAME #####

Linux dev-host-01 4.18.0-193.el8.x86_64 #1 SMP Fri May 8 10:59:10 UTC 2020 x86_64 x86_64 x86_64
GNU/Linux

##### HOSTNAME #####
##### HOSTNAME #####

dev-host-01
```

WAIT / SLEEP

```
#!/bin/bash
echo ""
echo "#####"
echo "##### SLEEP #####"
echo "#####"
echo ""

RUNNING=true
while($RUNNING)
do
    date
    SECONDS=$(date +%s)
    if [ "$SECONDS" -gt 30 ]
    then
        RUNNING=false
    fi
    sleep 1
done
echo ""
echo "##### WAIT #####"
echo "#####"
echo ""

(for ((i=0;i<5;i+=1));do echo "A.$i"; sleep 1; done) &
(for ((j=0;j<5;j+=1));do echo "B.$j"; sleep 1; done) &
wait
(for ((i=0;i<5;i+=1));do echo "C.$i";done) &
```

```
##### SLEEP #####
Mon May 23 14:23:04 +03 2022
Mon May 23 14:23:05 +03 2022
Mon May 23 14:23:06 +03 2022
Mon May 23 14:23:07 +03 2022
Mon May 23 14:23:08 +03 2022
Mon May 23 14:23:09 +03 2022
Mon May 23 14:23:10 +03 2022
Mon May 23 14:23:11 +03 2022
Mon May 23 14:23:12 +03 2022
Mon May 23 14:23:13 +03 2022
Mon May 23 14:23:14 +03 2022
Mon May 23 14:23:15 +03 2022
Mon May 23 14:23:16 +03 2022
Mon May 23 14:23:17 +03 2022
Mon May 23 14:23:18 +03 2022
Mon May 23 14:23:19 +03 2022
Mon May 23 14:23:20 +03 2022
Mon May 23 14:23:21 +03 2022
Mon May 23 14:23:22 +03 2022
Mon May 23 14:23:23 +03 2022
Mon May 23 14:23:24 +03 2022
Mon May 23 14:23:25 +03 2022
Mon May 23 14:23:26 +03 2022
Mon May 23 14:23:27 +03 2022
Mon May 23 14:23:28 +03 2022
Mon May 23 14:23:29 +03 2022
Mon May 23 14:23:30 +03 2022
Mon May 23 14:23:31 +03 2022

##### WAIT #####
A.0
B.0
A.1
B.1
A.2
B.2
A.3
B.3
A.4
B.4
C.0
C.1
C.2
C.3
C.4
```

FIND BY DATE

```
#!/bin/bash
echo ""
echo "#####"
echo "##### FIND BY DATE #####"
echo "#####"
echo ""

date > /var/tmp/eclipse/file123

find /var/tmp/eclipse -mmin -10

# -10 -> son 10 dakika içinde değişen
# +10 -> 10 dakika öncesine git, u tarihten önce değişenleri getir
#      Yani -10 olarak yazılan arama ile gelen sonuçların tam tersini getirir.
# 10 -> değişme tarihi tam 10. dakikada olanları getir.
```

```
#####
##### FIND BY DATE #####
#####

/var/tmp/eclipse/file123
```

TASNİF DIŞI

ARRAY MENU

```
#!/bin/bash
echo ""
echo "#####"
echo "##### ARRAY MENU #####"
echo "#####"
echo ""

echo "red green blue" > colors.txt
for i in $(cat colors.txt); do echo $i; done
color_array=($(cat colors.txt))
for((i=0;i<${#color_array[@]};i=i+1)); do echo "$i. ${color_array[$i]}"; done
read -p "Select a color (0-2) : " selection
echo "You selected ${color_array[$selection]}"
```

```
#####
##### ARRAY MENU #####
#####

red
green
blue
0. red
1. green
2. blue
Select a color (0-2) : 2
You selected blue
```

TASNİF DIŞI

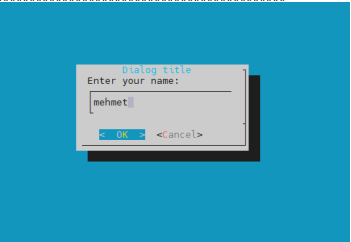
DIALOG

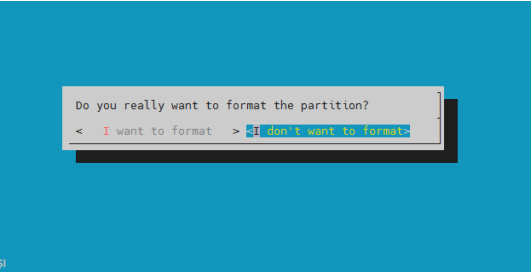
```
#!/bin/bash
echo ""
echo "#####"
echo "##### DIALOG #####"
echo "#####"
echo ""

value1=$(dialog --stdout --title "Dialog title" --inputbox "Enter your name:" 0 0)
dialog --stdout --default-button "no" --no-label "I don't want to format" --yes-label "I want to format" --
yesno "Do you really want to format the partition?" 0 0
value2=$?
value3=$(dialog --stdout --checklist "Select items:" 0 0 \
1 "Choice number one" off \
2 "Choice number two" on \
3 "Choice number three" off)
value4=$(dialog --stdout --radiolist "Select items:" 0 0 \
1 "Choice number one" Off \
2 "Choice number two" on \
3 "Choice number three" off)
value5=$( dialog --stdout --insecure --passwordbox "Enter your password:" 0 0 )
echo ""
echo "#####"
echo "value1=$value1"
echo "value2=$value2"
echo "value3=$value3"
echo "value4=$value4"
echo "value5=$value5"
```

```
#####

value1=mehmet
value2=1
value3=12
value4=3
value5=secret123
```





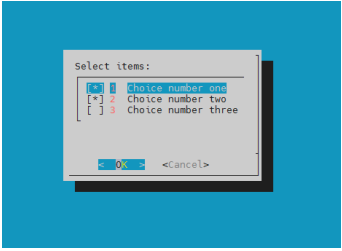
DIALOG

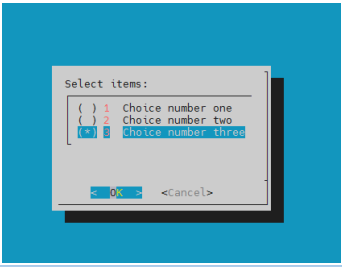
```
#!/bin/bash
echo ""
echo "#####"
echo "##### DIALOG #####"
echo "#####"
echo ""

value1=$(dialog --stdout --title "Dialog title" --inputbox "Enter your name:" 0 0)
dialog --stdout --default-button "no" --no-label "I don't want to format" --yes-label "I want to format" --
yesno "Do you really want to format the partition?" 0 0
value2=$?
value3=$(dialog --stdout --checklist "Select items:" 0 0 \
1 "Choice number one" off \
2 "Choice number two" on \
3 "Choice number three" off)
value4=$(dialog --stdout --radiolist "Select items:" 0 0 \
1 "Choice number one" Off \
2 "Choice number two" on \
3 "Choice number three" off)
value5=$( dialog --stdout --insecure --passwordbox "Enter your password:" 0 0 )
echo ""
echo "#####"
echo "value1=$value1"
echo "value2=$value2"
echo "value3=$value3"
echo "value4=$value4"
echo "value5=$value5"
```

```
#####

value1=mehmet
value2=1
value3=1 2
value4=3
value5=secret123
```





TASNİF DIŞI

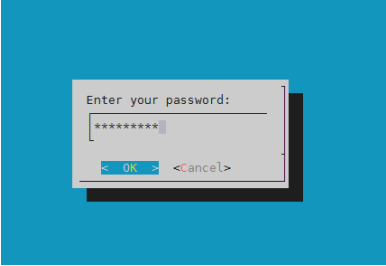
DIALOG

```
#!/bin/bash
echo ""
echo "#####"
echo "##### DIALOG #####"
echo "#####"
echo ""

value1=$(dialog --stdout --title "Dialog title" --inputbox "Enter your name:" 0 0)
dialog --stdout --default-button "no" --no-label "I don't want to format" --yes-label "I want to format" --
yesno "Do you really want to format the partition?" 0 0
value2=$?
value3=$(dialog --stdout --checklist "Select items:" 0 0 \
1 "Choice number one" off \
2 "Choice number two" on \
3 "Choice number three" off)
value4=$(dialog --stdout --radiolist "Select items:" 0 0 \
1 "Choice number one" Off \
2 "Choice number two" on \
3 "Choice number three" off)
value5=$( dialog --stdout --insecure --passwordbox "Enter your password:" 0 0 )
echo ""
echo "#####"
echo ""
echo "value1=$value1"
echo "value2=$value2"
echo "value3=$value3"
echo "value4=$value4"
echo "value5=$value5"
```

#####

value1=mehmet
value2=1
value3=1 2
value4=3
value5=secret123



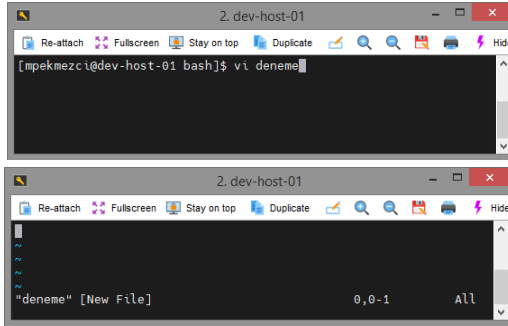
TASNİF DIŞI

EDITORS

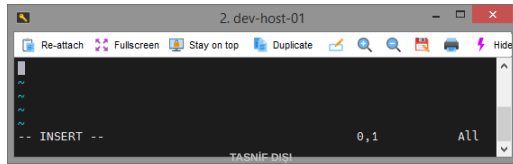
Vi
Mcredit

TASNİF DIŐI

VI



Klavyede **i** tuşuna basınca, aşağıdaki gibi “insert” moda geçiyoruz, artık yazabiliriz.

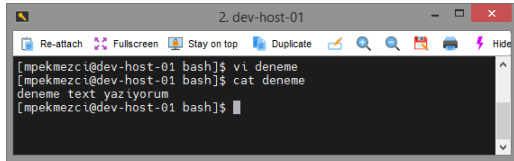


VI

Klavede **Esc** tuőuna basınca, aőağıdaki gibi “Escape” moda geiyoruz, artık yazamayız.

Klavede **:.wq** yazınca, aőağıdaki gibi dosya iine mevcut memory’deki halini yazar. (NOT: **:.:** karakterini de bizim yazmamız gerekir, kendisi yazmaz.)

VI

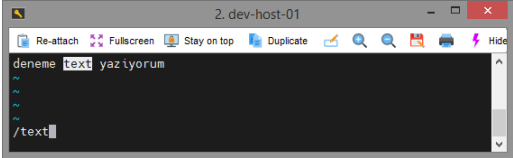


```
2. dev-host-01
[mpekmezci@dev-host-01 bash]$ vi deneme
[mpekmezci@dev-host-01 bash]$ cat deneme
deneme text yazıyorum
[mpekmezci@dev-host-01 bash]$
```

TASNİF DIŞI

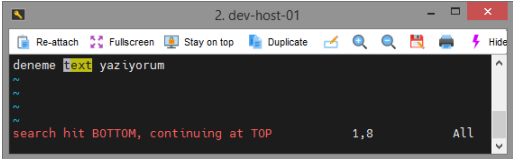
VI - SEARCH

Klavede **Esc** tuşuna bastıktan sonra, **/text** yazısını yazarsak, **text** kelimesini arar.



A terminal window titled "2. dev-host-01" with a toolbar at the top containing icons for "Re-attach", "Fullscreen", "Stay on top", "Duplicate", and "Hide". The terminal content shows the text "deneme text yazıyorum" on the first line, followed by three tilde characters (~) on subsequent lines. The cursor is positioned at the end of the line "/text".

Klavede **"n"** tuşuna basarsak bir sonraki **text** yazısına gitmeye çalışır. (**n**'nin anlamı next'tir)

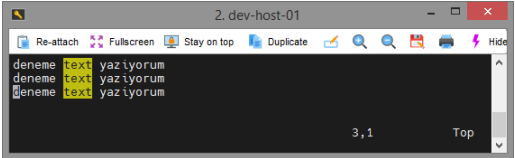


A terminal window titled "2. dev-host-01" with the same toolbar as the previous screenshot. The terminal content shows "deneme text yazıyorum" on the first line, followed by three tilde characters (~). The word "text" in the first line is highlighted in yellow. At the bottom of the terminal, the text "search hit BOTTOM, continuing at TOP" is displayed in red, followed by the number "1,8" and the word "All".

TASNİF DIŞI

VI – COPY – PASTE - DELETE

Klavede **Esc** tuşuna bastıktan sonra, klavyede **“yy”** yazarsak, bulunduğu satırı kopyalar.



Klavede **“p”** tuşuna basarsak da ilgili satırı bir altına paste eder.

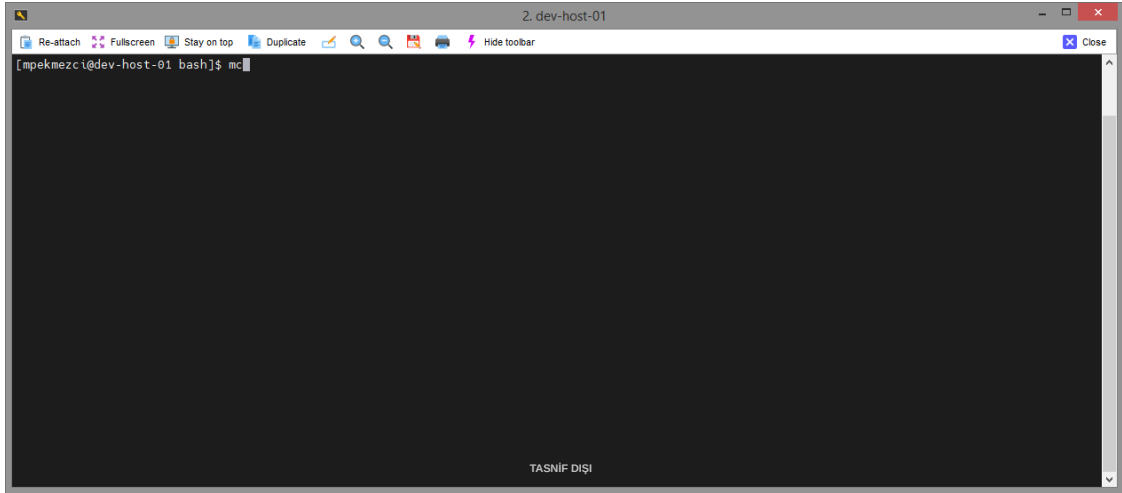
Benzer komutlar :

- Klavede **“3yy”** tuşuna basarsak , imlecin bulunduğu satır dahil 3 satırı kopyalar ve **“p”** ile bu 3 satırı paste eder.
- Klavede **“dd”** tuşuna basarsak , imlecin bulunduğu satırı siler.

TASNİF DIŞI

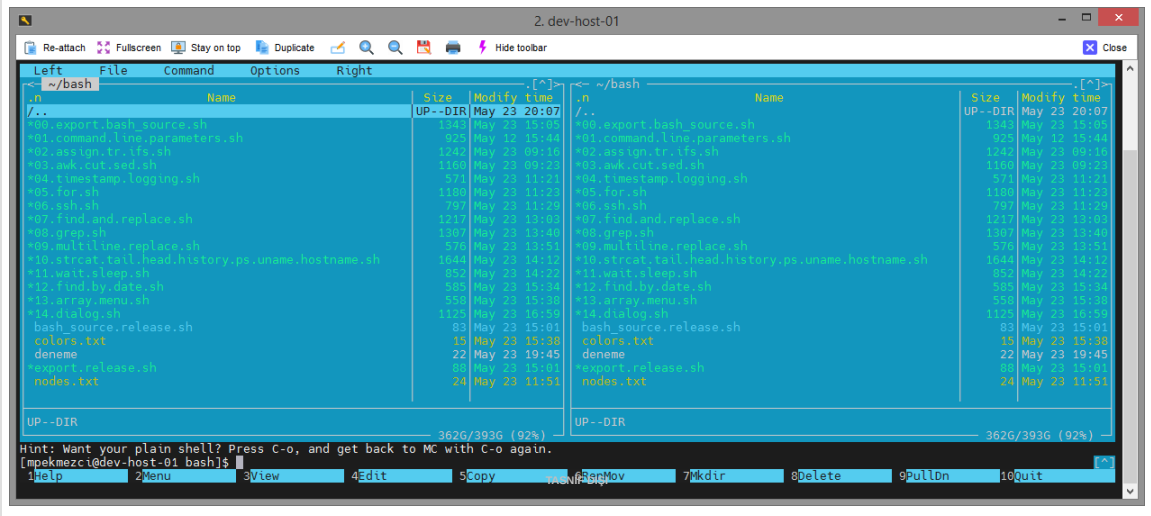
MC

mc (Midnight Commander) , komut satırında çalışan , dosyalar arasında gezinmeyi ve edit etmeyi çok kolaylaştıran bir uygulamadır.



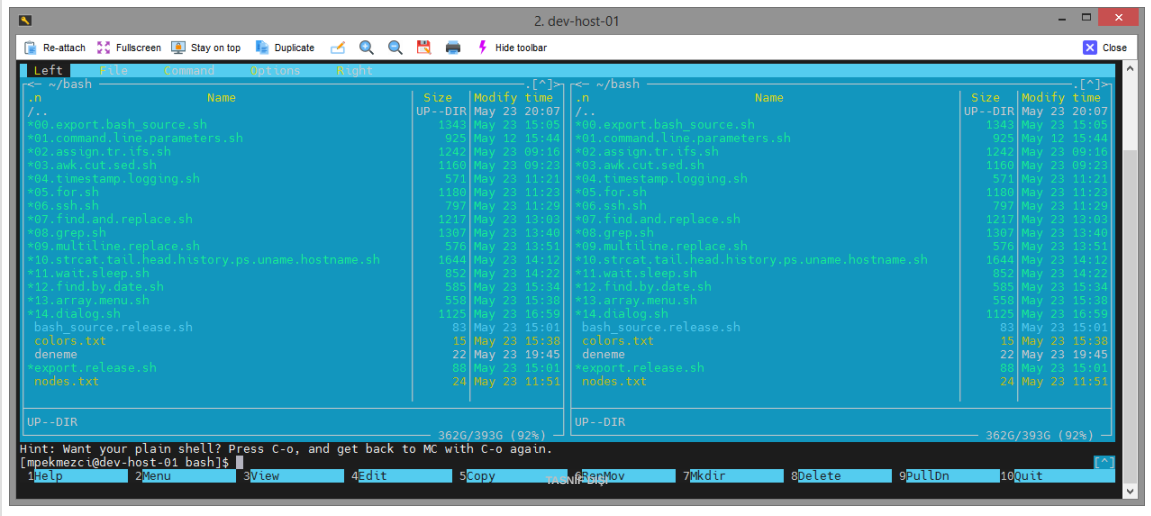
MC

Program açılınca, aşağıdaki gibi sağ ve sol ekranlarında dosya ve dizinleri gezme imkanı vermektedir.



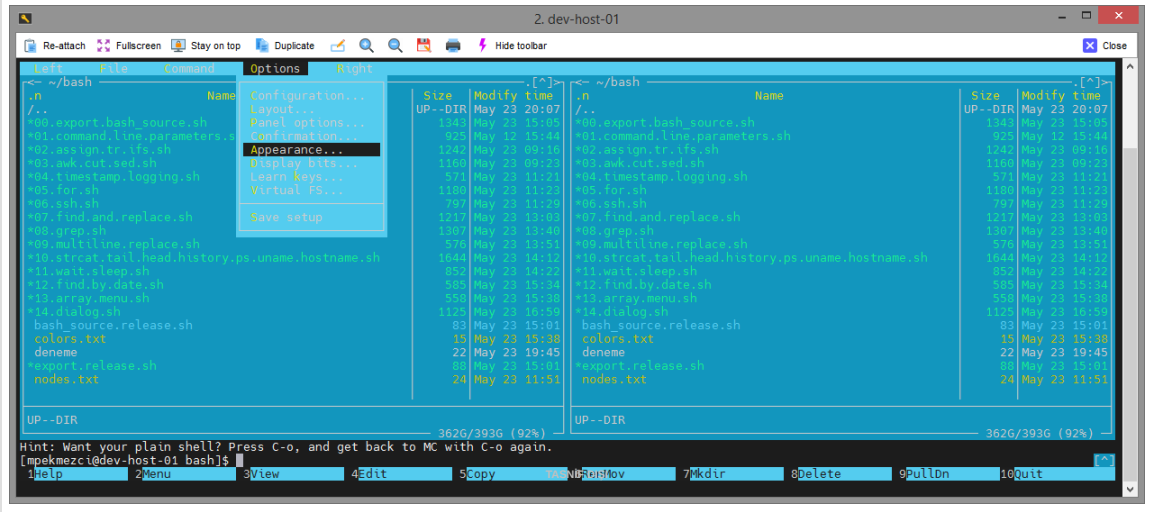
MC

F9 tuşuna basınca yukarıdaki menüye geçilir.



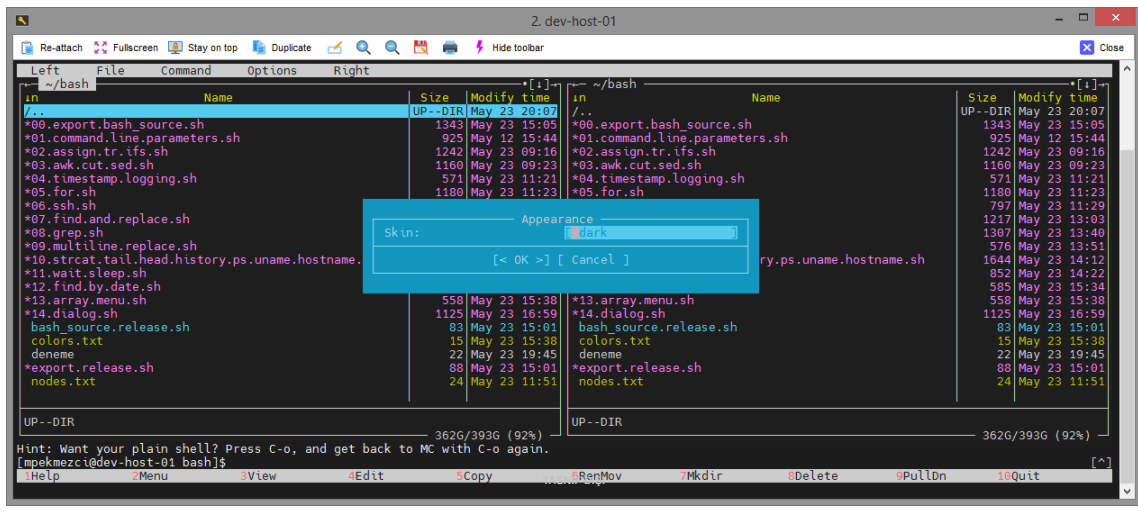
MC

Ok tuşları ile options > Appearance 'a gidilip görünüş değiştirilir.



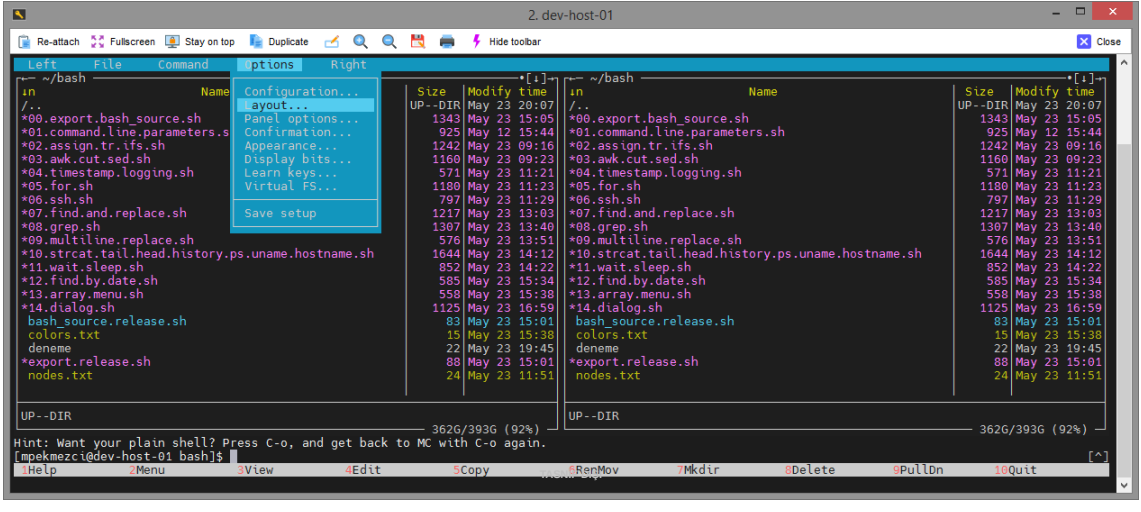
MC

Seçim yapıldıktan sonra TAB ile "OK" butonun üstüne gelinir ve "Enter" tuşuna basılır.



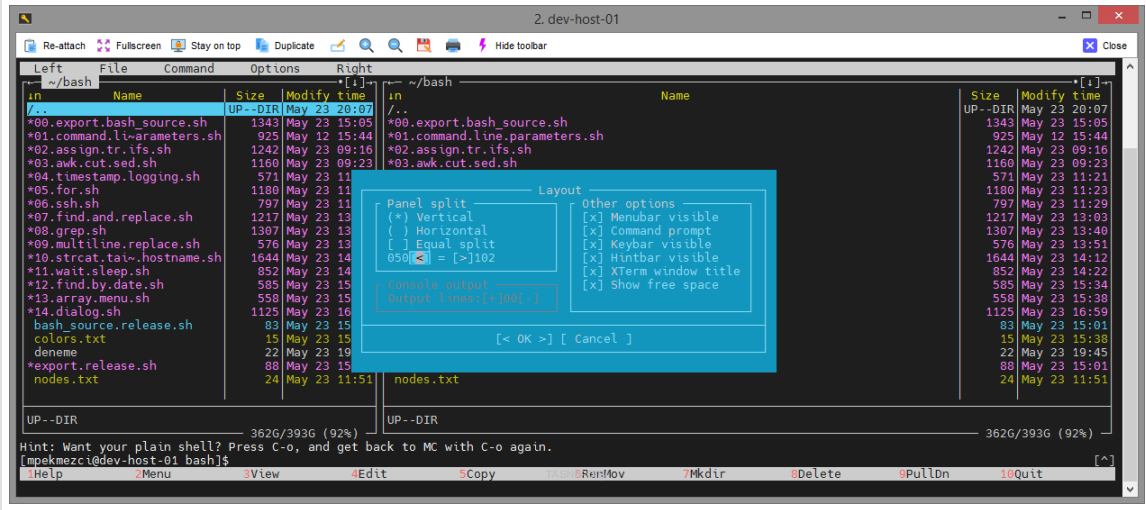
MC

Layout menüsünde ekranın sağ/sol ayarları yapılır



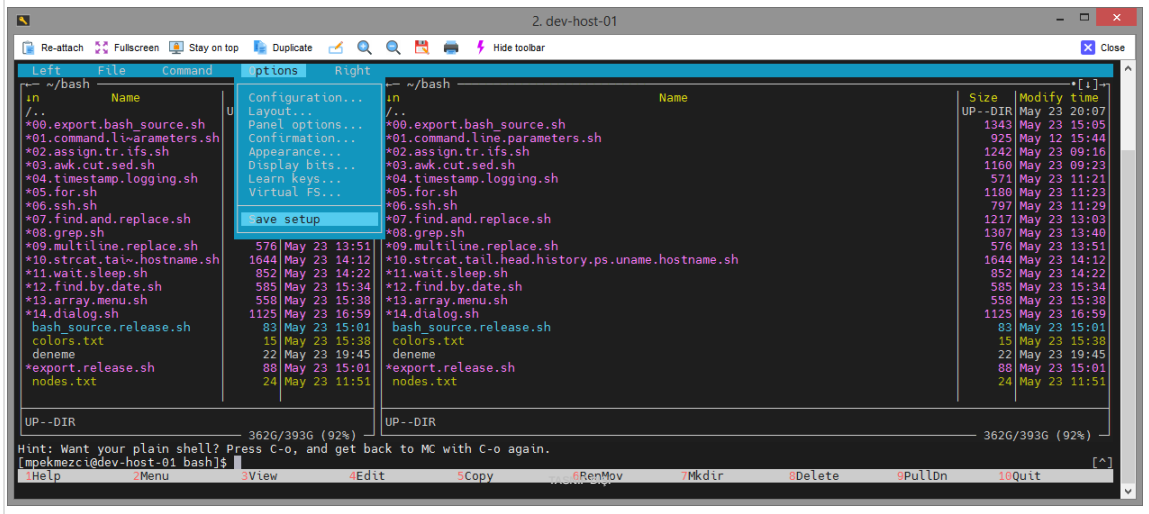
MC

Layout menüsünde ekranın sağ/sol ayarları yapılır



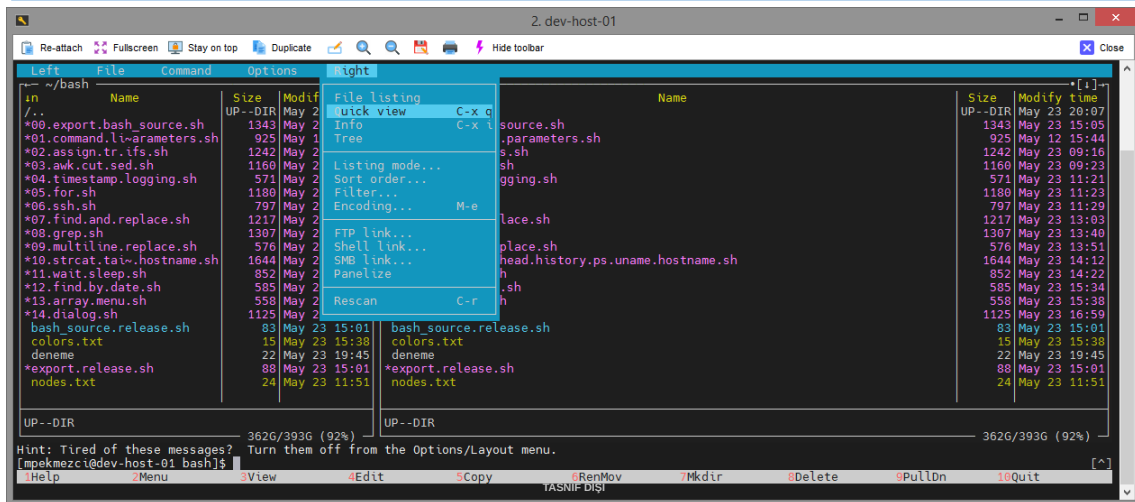
MC

Yapılan ayarlar aşağıdaki gibi save edilir.



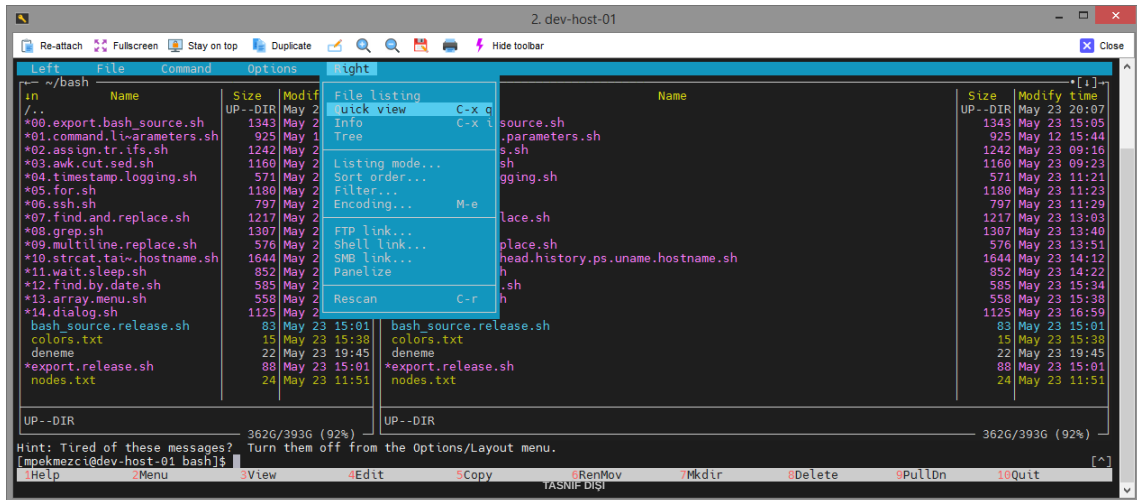
MC

F9 > Right > Quick View seçilerek, soldaki dosyanın içeriğinin sağda görünmesi sağlanır.



MC

F9 > Right > Quick View seçilerek, soldaki dosyanın içeriğinin sağda görünmesi sağlanır.



MC

Ok tuşları ile sağ menüdeki bir dosya seçilip “F4” tuşuna basınca edit moduna geçilir (VI’den daha kolaydır ☺)

The screenshot shows the MC editor window titled '2. dev-host-01'. The interface is split into two main panes. The left pane displays a file list with columns for Name, Size, and Modify time. The file '03.awk.cut.sed.sh' is selected. The right pane shows the content of this file, which is a shell script. The script includes comments and commands for setting up an environment, displaying usage information, and performing file operations. The bottom status bar shows the current file path and various keyboard shortcuts.

Name	Size	Modify time
an		
UP--DIR		May 23 20:07
*00.export.bash_source.sh	1343	May 23 15:05
*01.command_line_parameters.sh	925	May 12 15:44
*02.assign_tr_ifs.sh	1242	May 23 09:16
*03.awk.cut.sed.sh	1160	May 23 09:23
*04.timestamp_logging.sh	571	May 23 11:21
*05.for.sh	1180	May 23 11:23
*06.ssh.sh	797	May 23 11:29
*07.find.and.replace.sh	1217	May 23 13:03
*08.grep.sh	1307	May 23 13:40
*09.multiline.replace.sh	576	May 23 13:51
*10.strcat_tai~.hostname.sh	1644	May 23 14:12
*11.wait.sleep.sh	852	May 23 14:22
*12.find.by.date.sh	585	May 23 15:34
*13.array.menu.sh	558	May 23 15:38
*14.dialog.sh	1125	May 23 16:59
bash_source.release.sh	83	May 23 15:01
colors.txt	15	May 23 15:38
deneme	22	May 23 19:45
*export.release.sh	88	May 23 15:01
nodes.txt	24	May 23 11:51

```

/home/mpekmezci/bash/03.awk.cut.sed.sh 694/1160 59%
#!/bin/bash
echo ""
echo "##### AWK USAGE #####"
echo "#####"
echo ""
ls -l
ls -l | awk '{print $1-"-$9\''
ls -l | grep -v total | awk '{print $1-"-$9\''
echo ""
echo "##### CUT USAGE #####"
echo "#####"
echo ""
echo $PATH
echo $PATH | cut -d: -f1,2
echo "project-platform" | cut -d- -f2
  
```

Hint: Tired of these messages? Turn them off from the Options/Layout menu.

[mpekmezci@dev-host-01 bash]\$

Help Menu View Edit Copy RenMov Mkdir Delete PullDn Quit

MC

Dosyada düzenlememizi yaptıktan sonra “F2” tuşu ile save ederiz, “F10” tuşu ile bir önceki slayttaki ekrana döneriz.

```

03.awk.cut.sed.sh [----] 0 L: [ 1+ 5 6/ 38] *(256 /1160b) 0101 0x065
#!/bin/bash
echo ""
echo "##### AWK USAGE #####"
echo ""
echo ""
ls -l
echo ""
ls -l | awk '{print $1--"$9"}'
ls -l | grep -v total | awk '{print $1--"$9"}'

echo ""
echo "##### CUT USAGE #####"
echo ""
echo ""
echo $PATH
echo $PATH | cut -d: -f1,2
echo "project-platform" | cut -d- -f2

echo ""
echo "##### SED USAGE #####"
echo ""
echo ""

```

confirm save file: "/home/mpekmeczi/bash/03.awk.cut.sed.sh"

Save Cancel

Help Save Mark Replac Copy Move Search Delete PullIn Quit