

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"
```

\$#, \$?, \$!

-d, -f, -e

-a, -O

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/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 "#####
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 ""

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

```
#####
##### 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 "#####
##### FOR USAGE 1 #####
#####
echo ""
echo "#####
##### FOR USAGE 2 #####
#####
echo ""
echo "#####
##### FOR USAGE 3 #####
#####
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 "#####
echo ""

ssh-keygen

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

```
#####
#####
```

/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

```
#####
#####
```

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

GREP

```
#!/bin/bash
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.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 MULTILINE 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/imsg' /var/tmp/test.replace.txt
cat /var/tmp/test.replace.txt
```

```
#####
##### PERL MULILINE REPLACEMENT #####
#####

deneme1
deneme2
deneme3
deneme4
deneme5

#####

deneme1
DENEME
deneme4
deneme5
```

STRCAT / HISTORY / PS / PGREP / UNAME / HOSTNAME

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

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

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

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

```
#####
##### STRING CONCAT #####
#####
STR1=
red blue

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

#####
##### 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

#####

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 --nrepidfile --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 "#####
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 "#####"
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 olanları 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
```

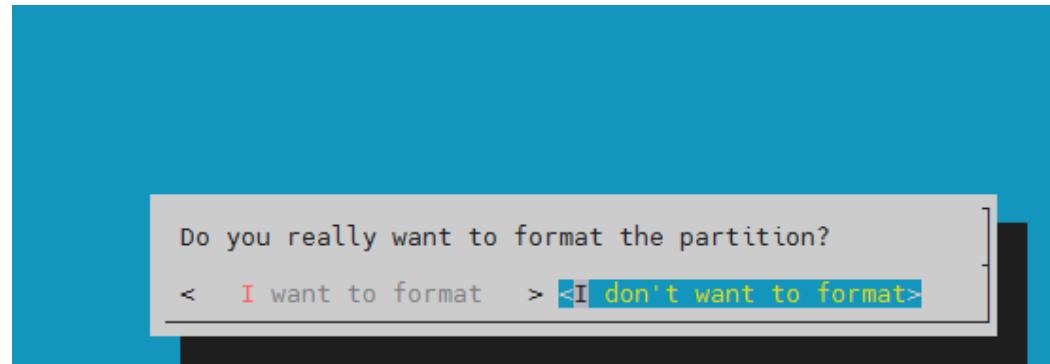
DIALOG

```
#!/bin/bash
echo ""
echo "#####
echo "##### DIALOG #####
echo "#####
echo ""
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=$(dialog --stdout --checkbox "Select items:" 0 0 0 \
1 "Choice number one" off \
2 "Choice number two" on \
3 "Choice number three" off)
value4=$(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 ""

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
```

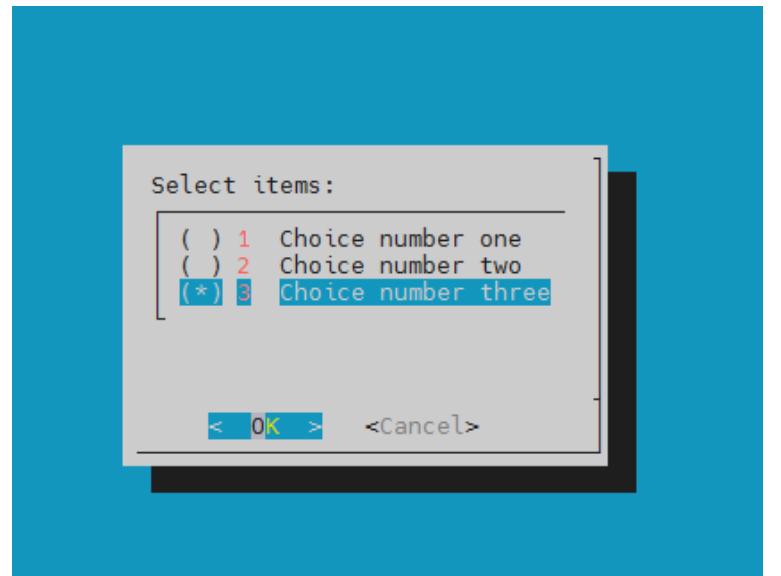
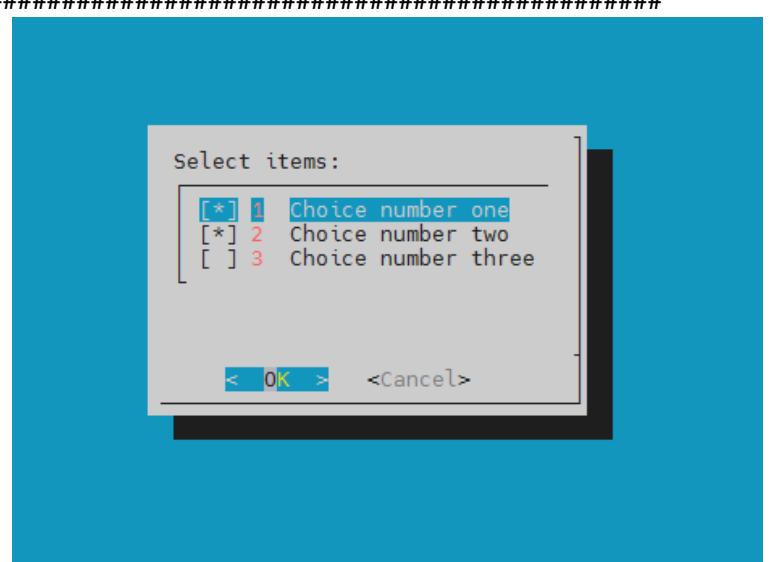


DIALOG

```
#!/bin/bash
echo ""
echo "#####
echo "##### DIALOG #####
echo "#####
echo ""
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=$(dialog --stdout --checkbox "Select items:" 0 0 0 \
1 "Choice number one" off \
2 "Choice number two" on \
3 "Choice number three" off)
value4=$(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
```

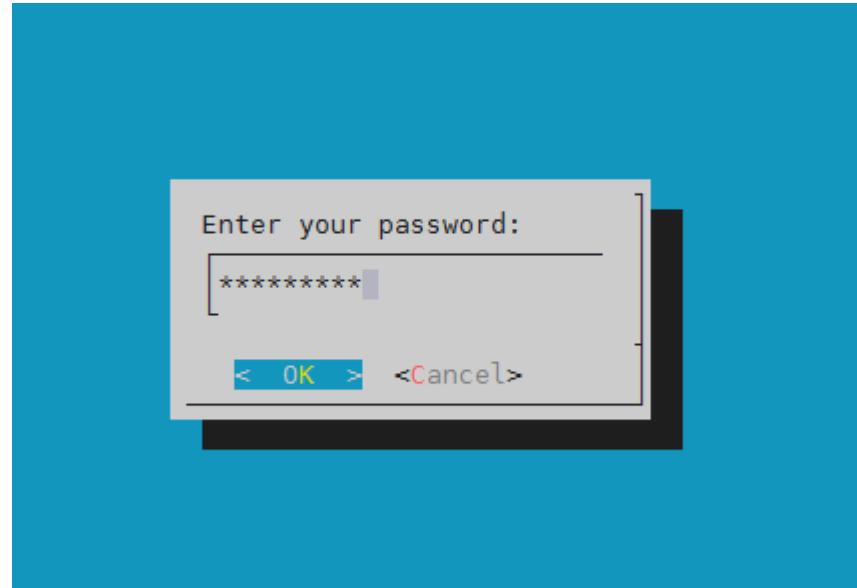


DIALOG

```
#!/bin/bash
echo ""
echo "#####
echo "##### DIALOG #####
echo "#####
echo ""
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=$(dialog --stdout --checkbox "Select items:" 0 0 0 \
1 "Choice number one" off \
2 "Choice number two" on \
3 "Choice number three" off)
value4=$(dialog --stdout --radiolist "Select items:" 0 0 0 \
1 "Choice number one" Off \
2 "Choice number two" on \
3 "Choice number three" off)
value5=$( dialog --stdout --insecure --passwordbox "Enter your password:" 0 0 )
echo ""
echo "#####
echo "#####
echo ""
echo "value1=$value1"
echo "value2=$value2"
echo "value3=$value3"
echo "value4=$value4"
echo "value5=$value5"
```

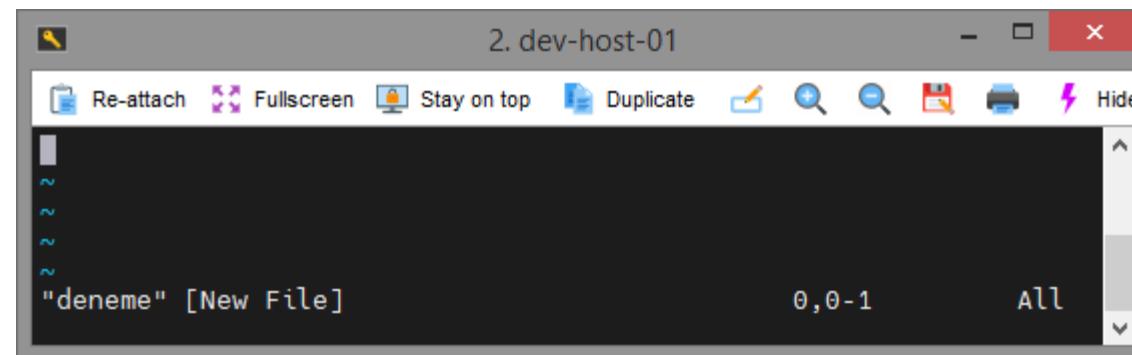
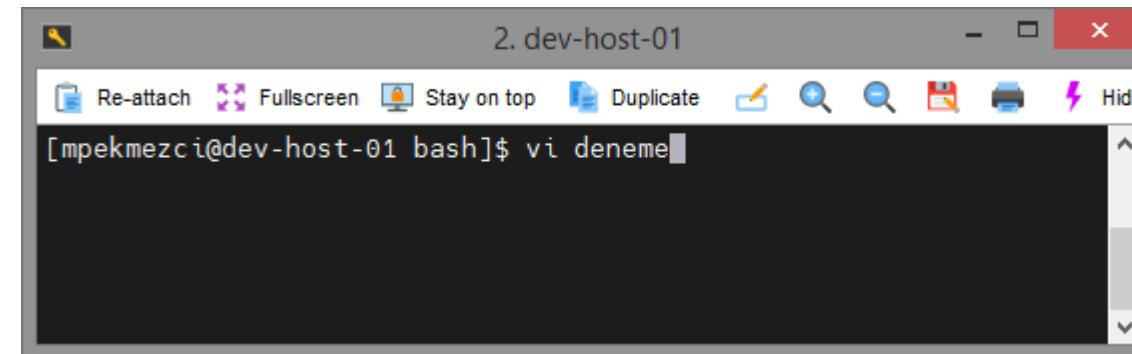
```
#####
value1=mehmet
value2=1
value3=1 2
value4=3
value5=secret123
```



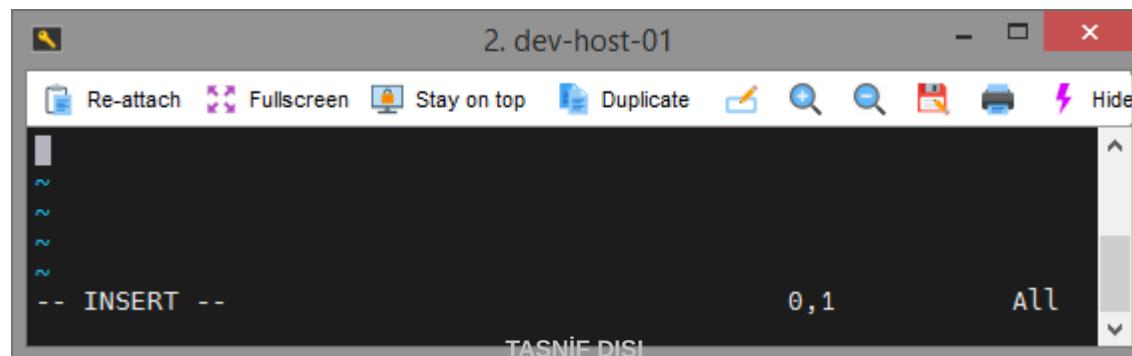
EDITORS

Vi
Mcedit

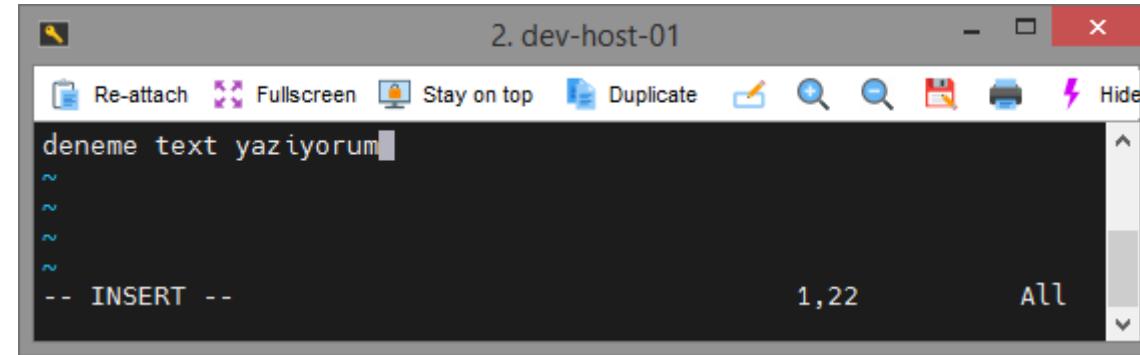
VI



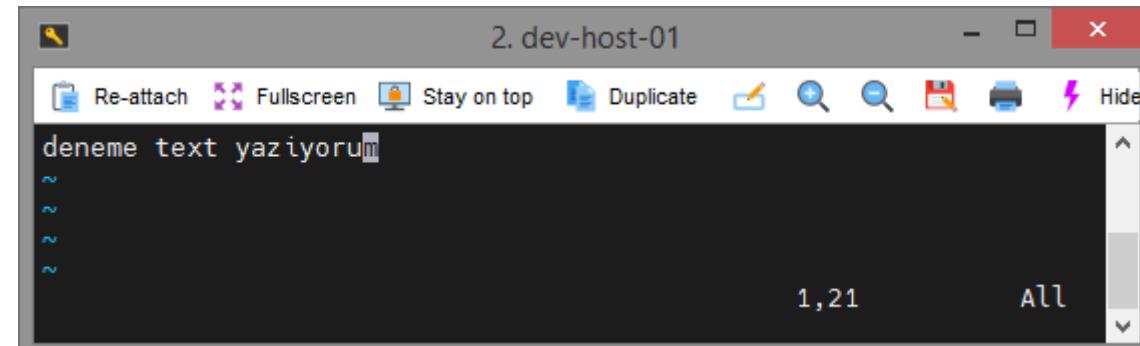
Klavyede **i** tuşuna basınca, aşağıdaki gibi "insert" moda geçiyoruz, artık yazabiliriz.



VI



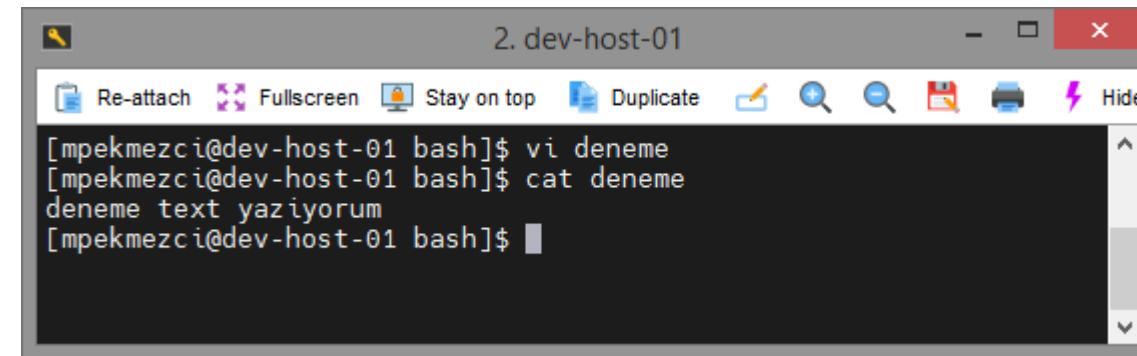
Klavede Esc tuşuna basınca, aşağıdaki gibi "Escape" moda geçiyoruz, artık yazamayız.



Klavede ":wq" yazınca, aşağıdaki gibi dosya içine mevcut memory'deki halini yazar. (NOT: ":" karakterini de bizim yazmamız gereklidir, kendisi yazmaz.)



VI

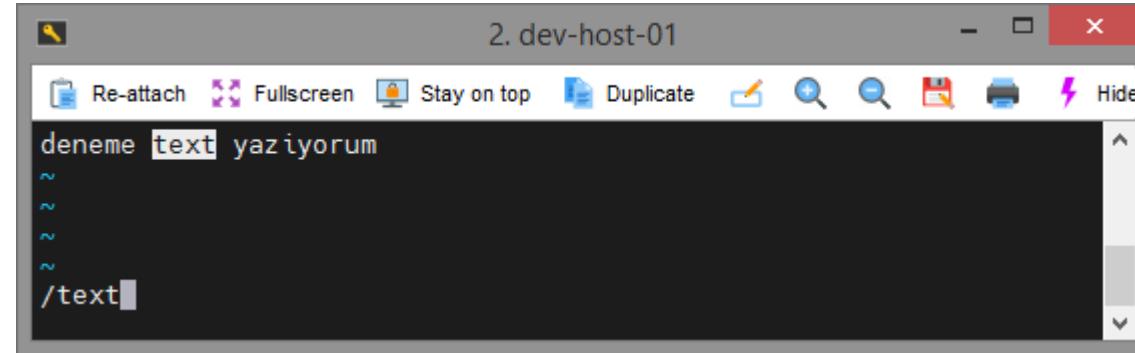


The screenshot shows a terminal window titled "2. dev-host-01". The window has a dark gray header bar with several icons: a key icon, "Re-attach", "Fullscreen", "Stay on top", "Duplicate", a pencil icon, a magnifying glass icon, a folder icon, and a lightning bolt icon. To the right of these icons are "Hide" and a red close button. The main area of the terminal is black and contains white text. It shows a command-line session:

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

VI - SEARCH

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

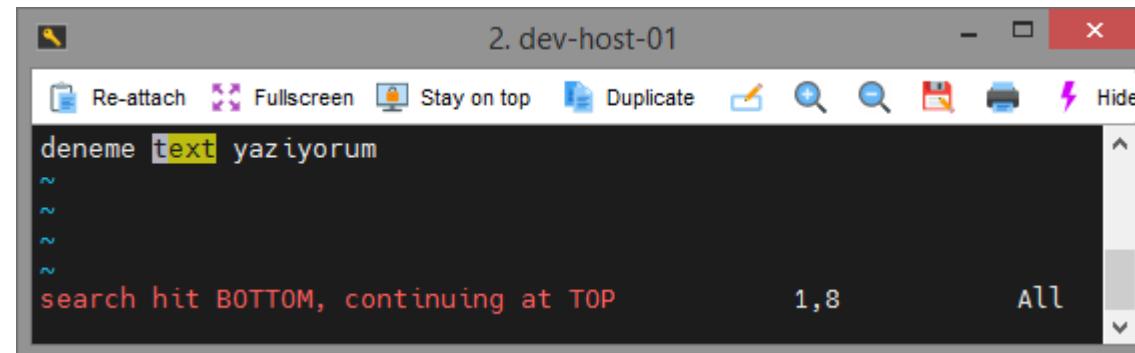


A screenshot of the vi editor window titled "2. dev-host-01". The status bar shows the command mode indicator (~). The text buffer contains the following lines:

```
deneme text yazıyorum
~
~
~
~
~
/text
```

The word "text" is highlighted in the buffer. The status bar at the bottom right shows the search results: "search hit BOTTOM, continuing at TOP" followed by the byte range "1,8" and the search direction "All".

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



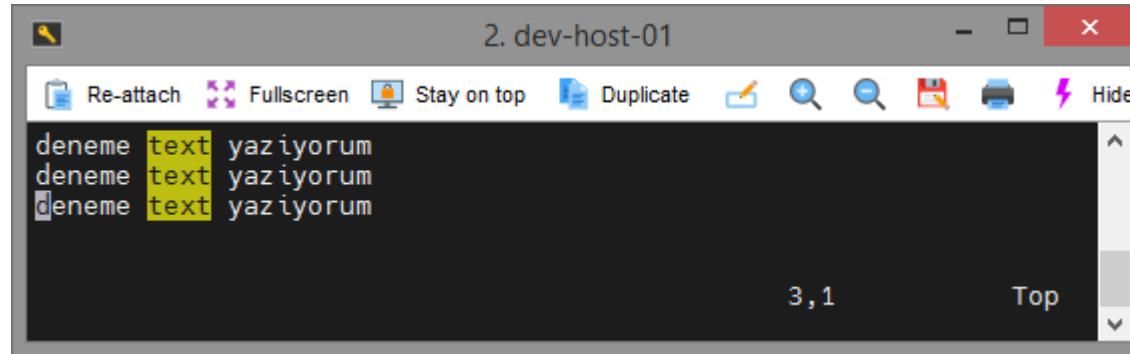
A screenshot of the vi editor window titled "2. dev-host-01". The status bar shows the command mode indicator (~). The text buffer contains the following lines:

```
deneme text yazıyorum
~
~
~
~
~
/text
```

The word "text" is highlighted in the buffer. The status bar at the bottom right shows the search results: "search hit BOTTOM, continuing at TOP" followed by the byte range "1,8" and the search direction "All".

VI – COPY – PASTE - DELETE

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



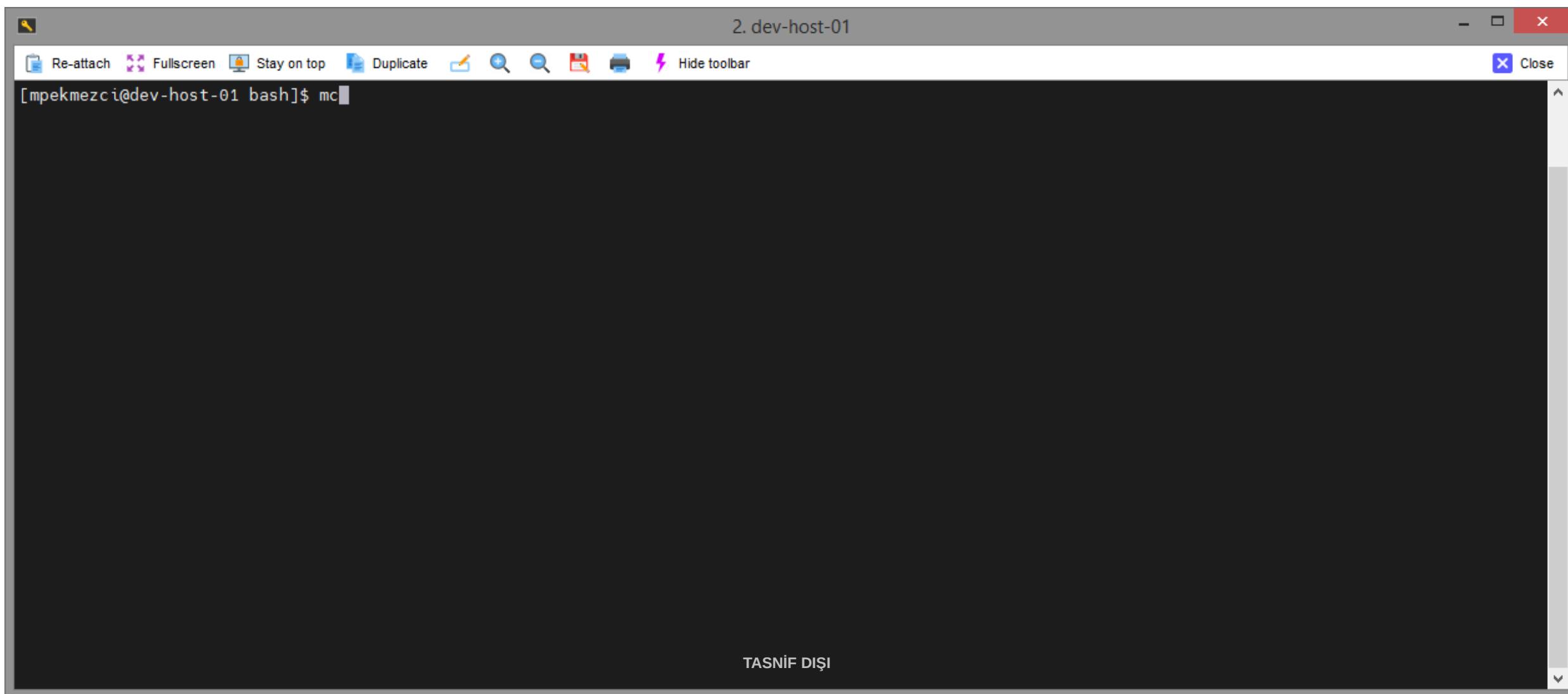
Klavede “p” tuşuna basarsak da ilgili satırı bir altına paste eder.

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.

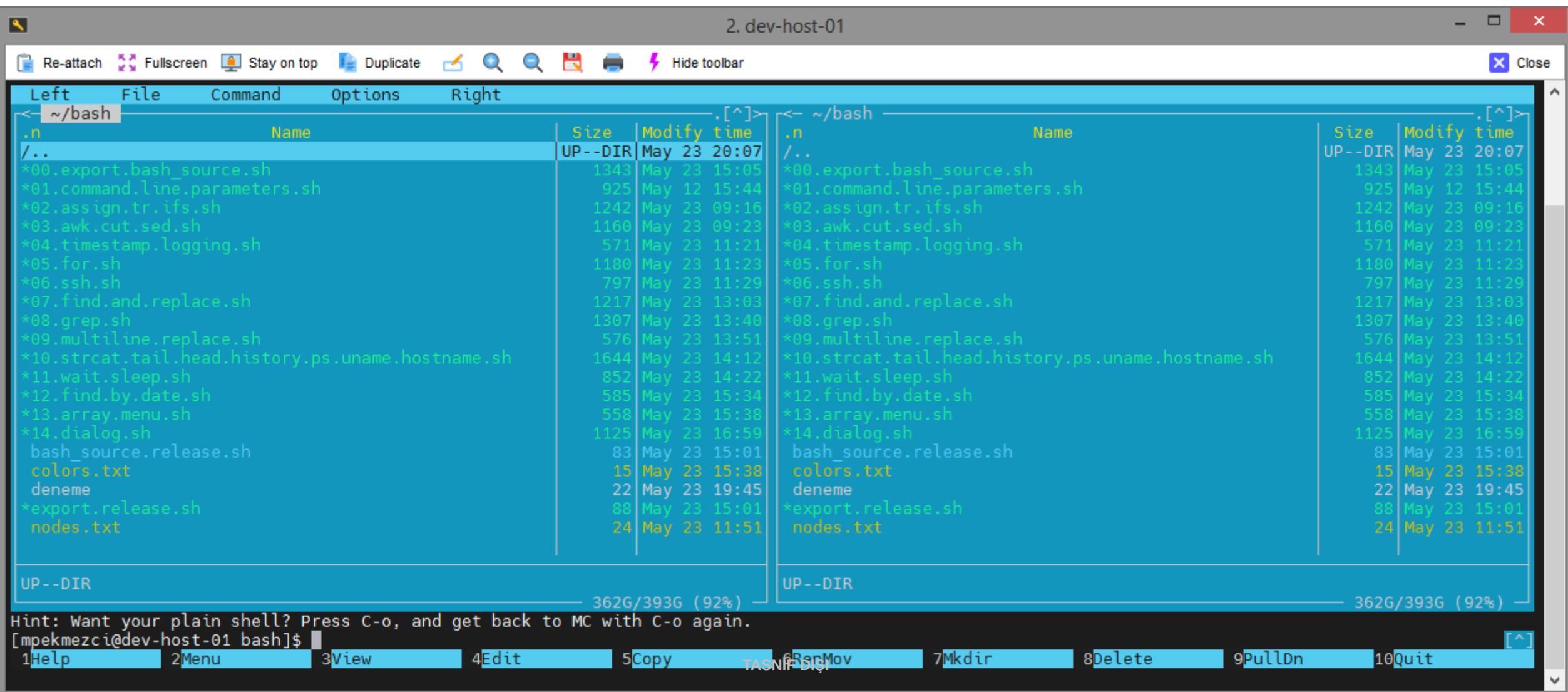
MC

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



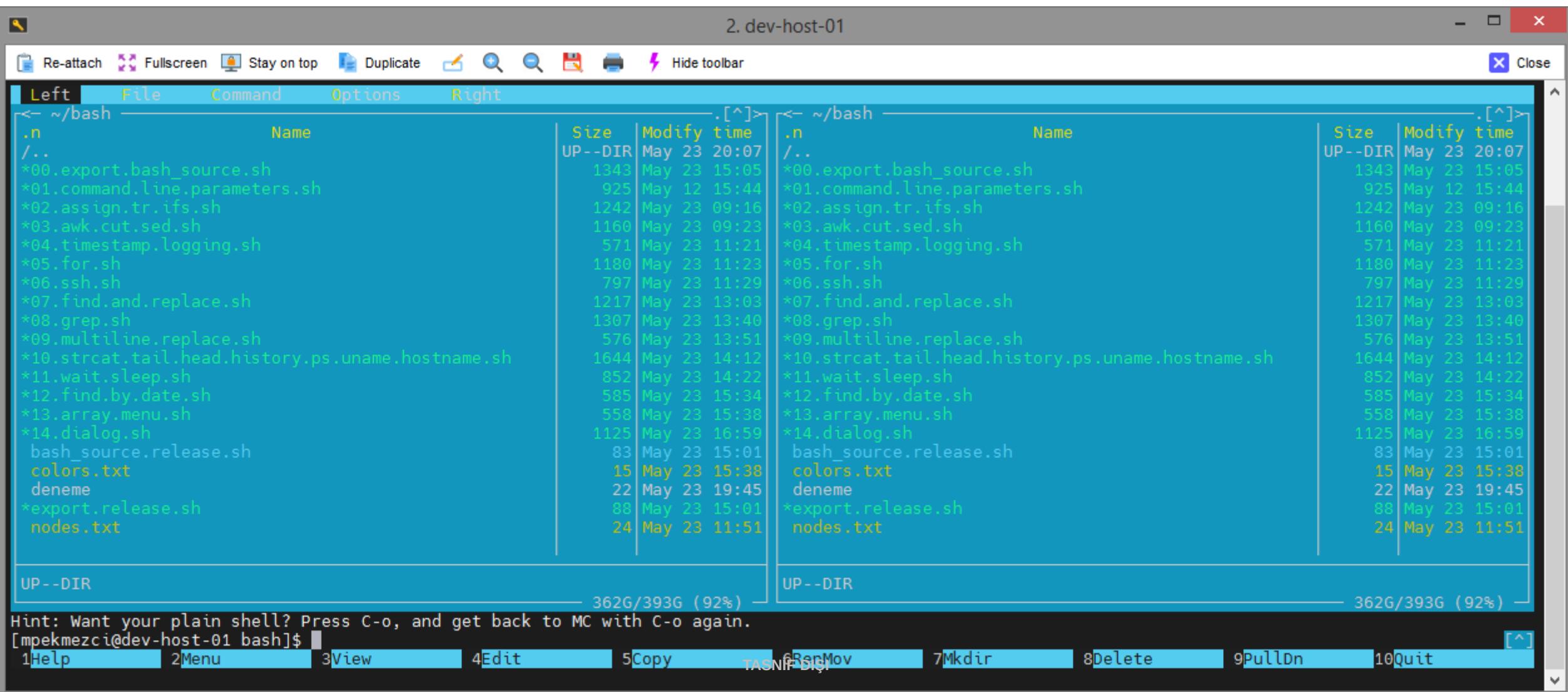
MC

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



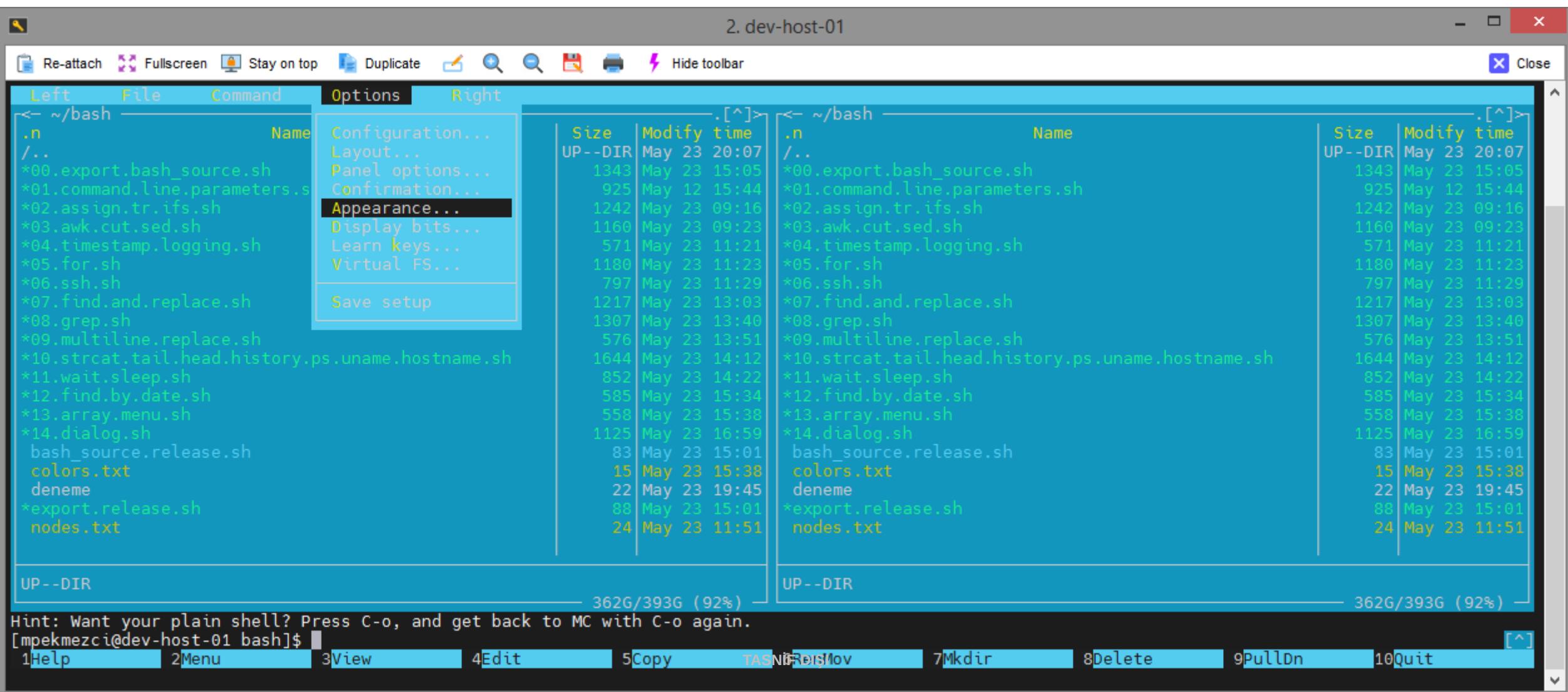
MC

F9 tuşuna basınca yukarıdaki menüye geçilir.



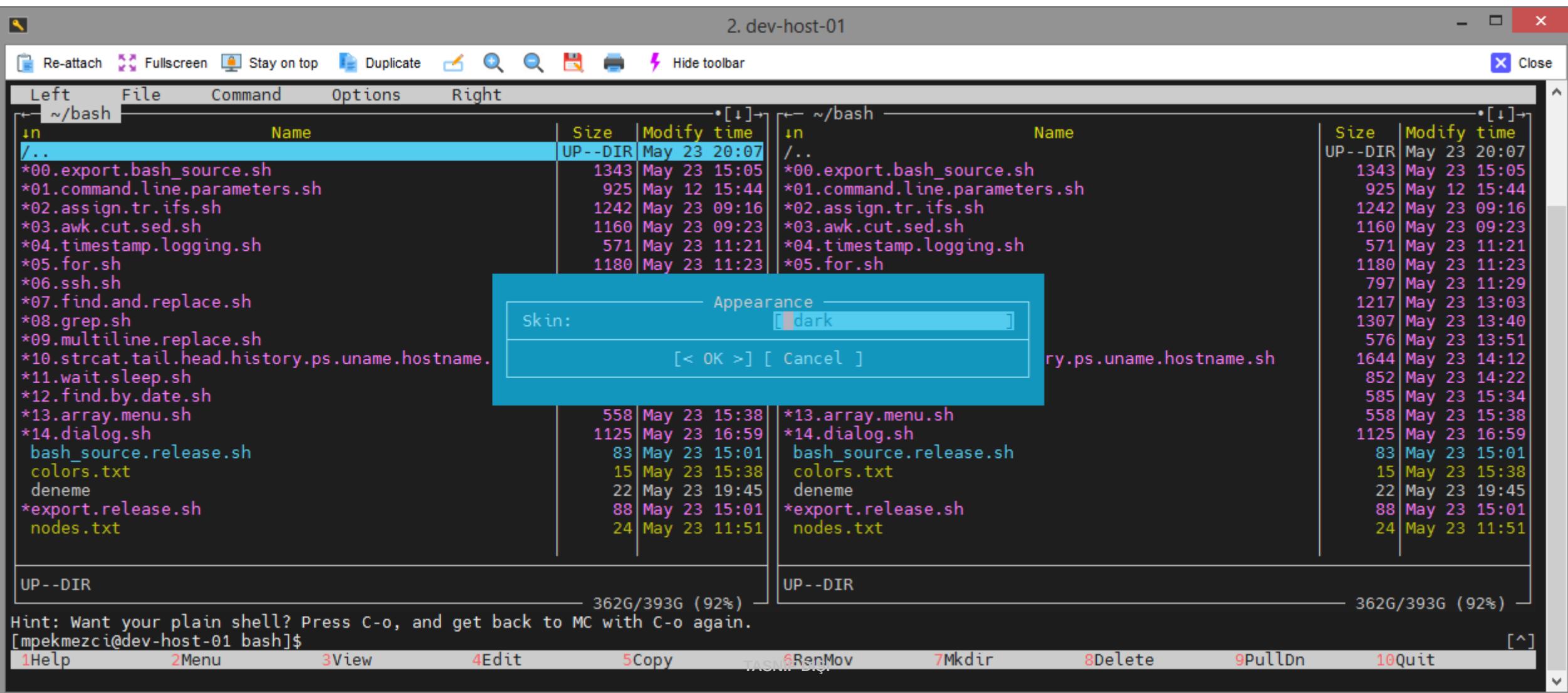
MC

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



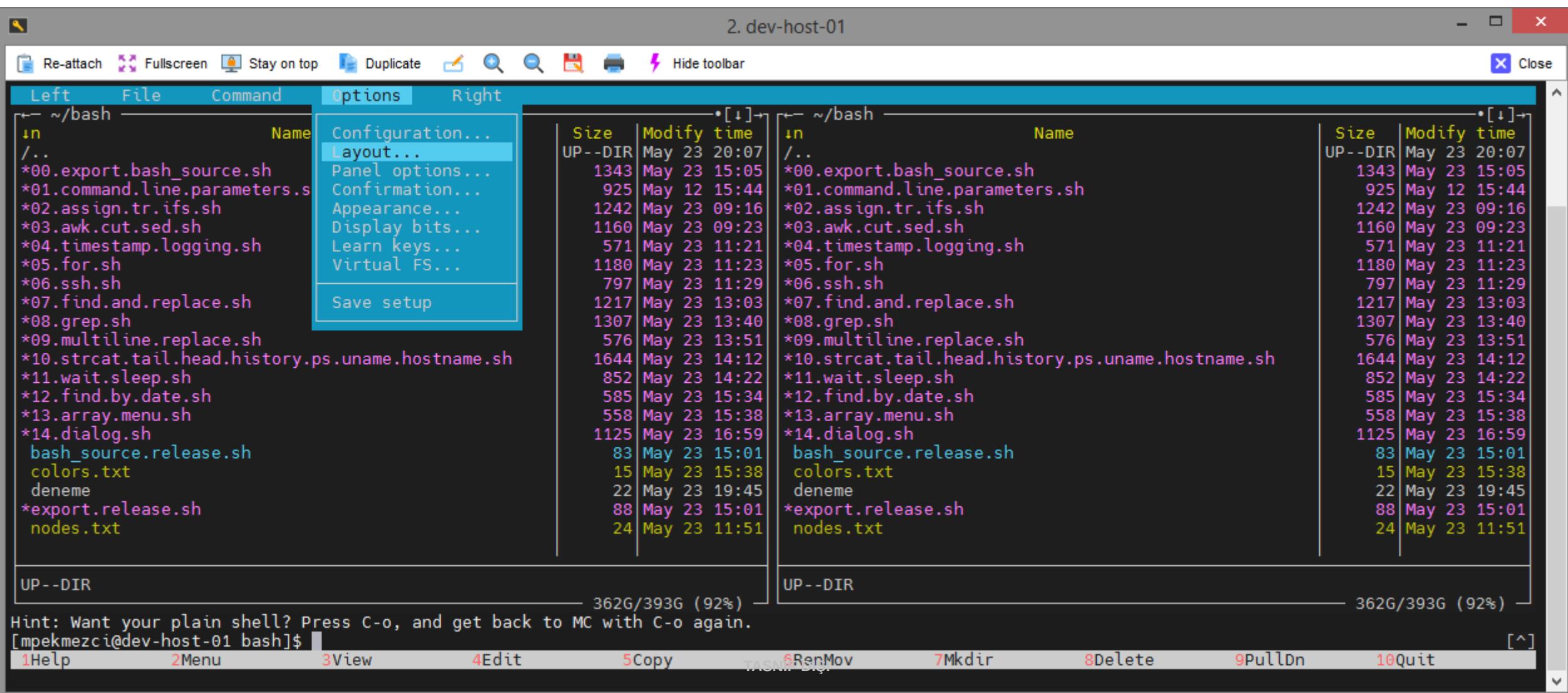
MC

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

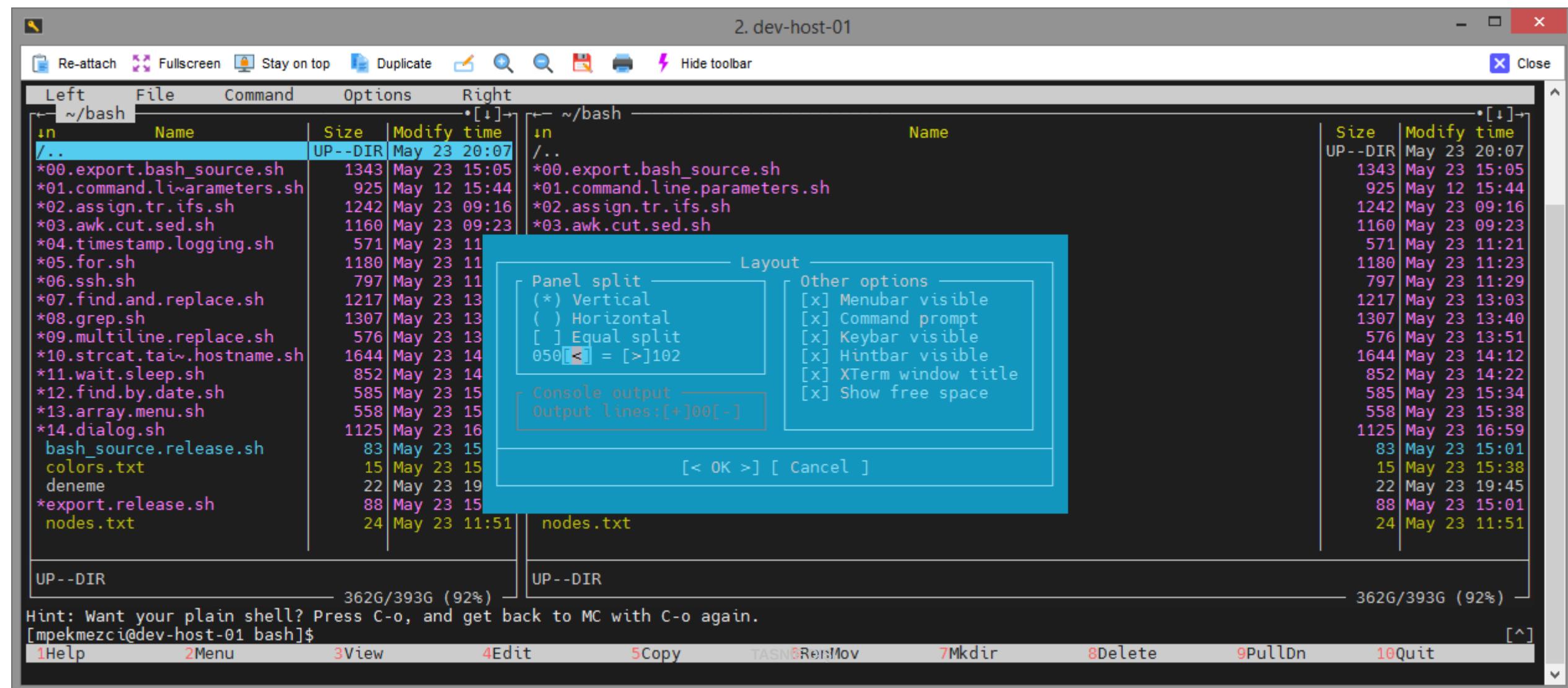


MC

Layout menüsünde ekranın sağ/sol ayarları yapılır

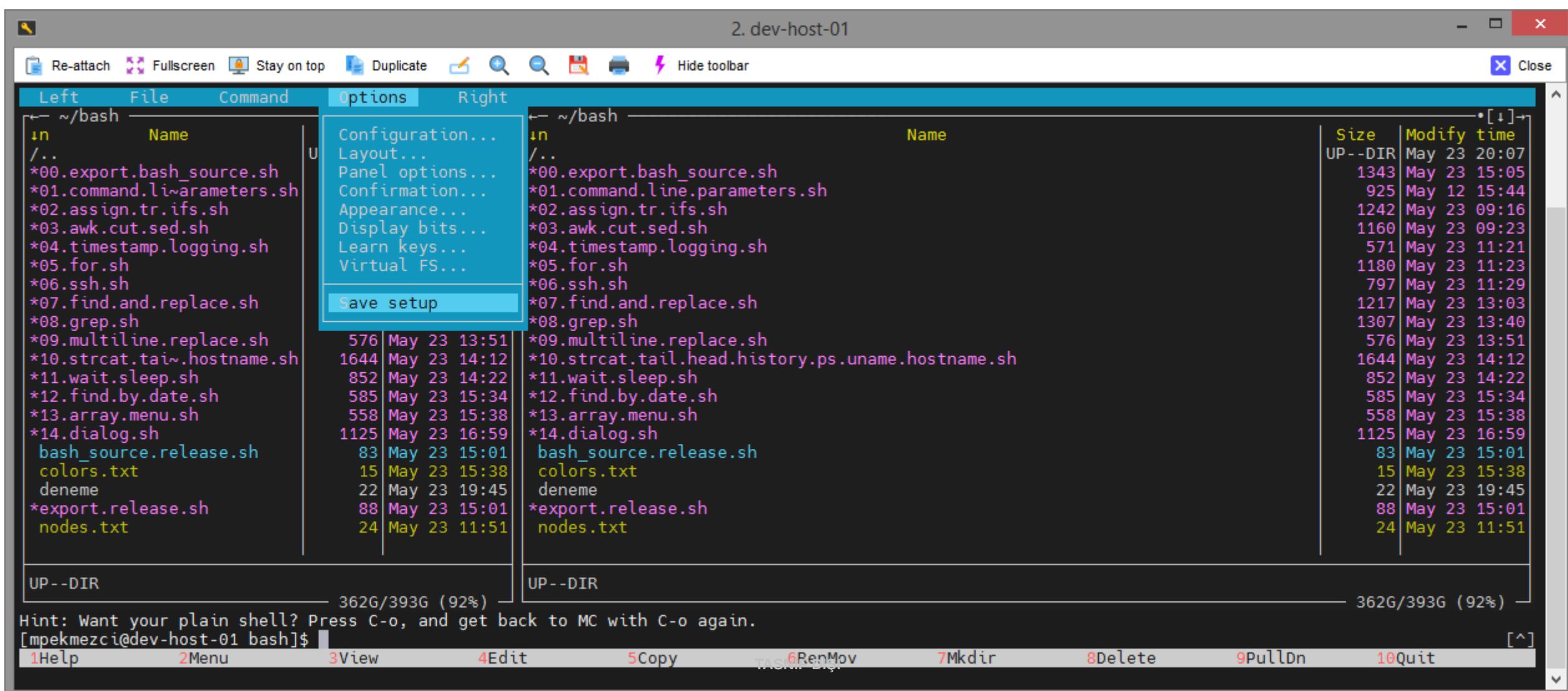


Layout menüsünde ekranın sağ/sol ayarları yapılır



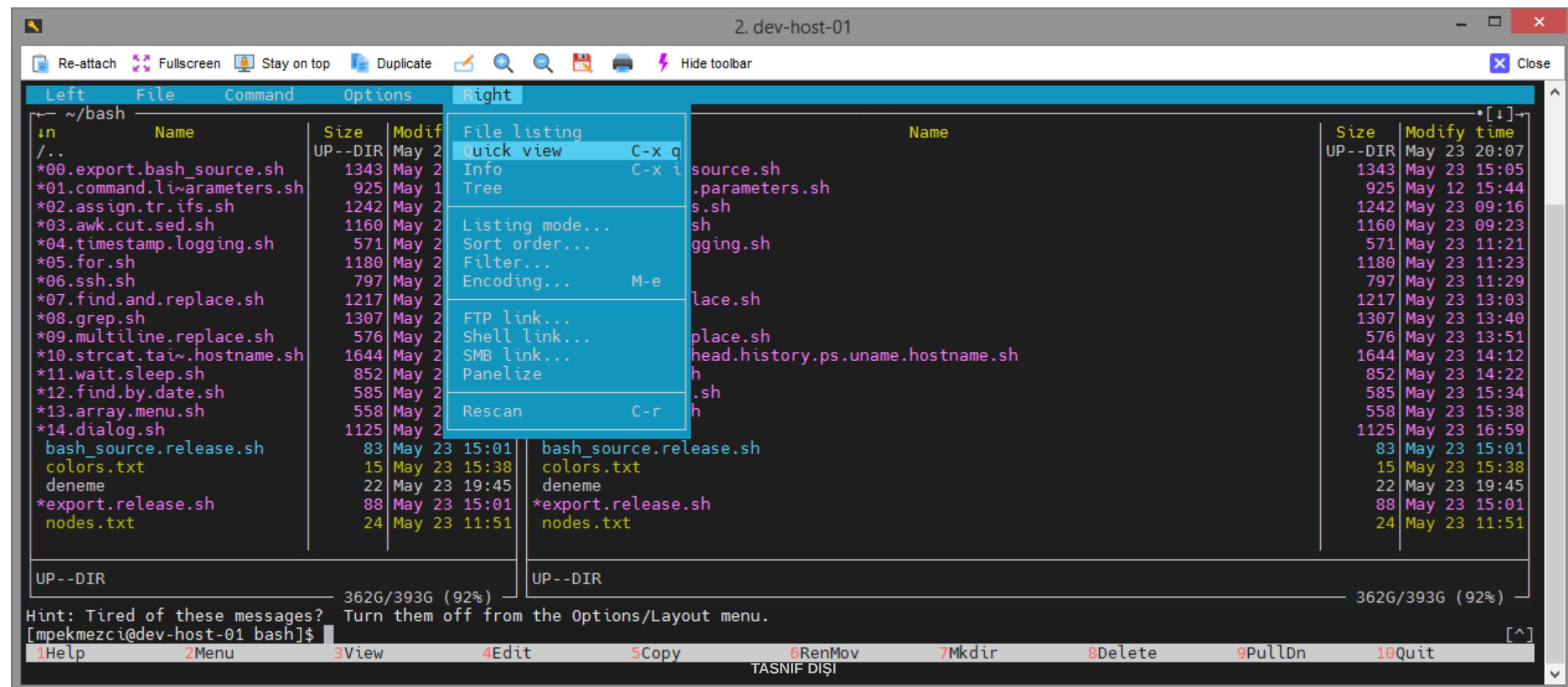
MC

Yapılan ayarlar aşağıdaki gibi save edilir.



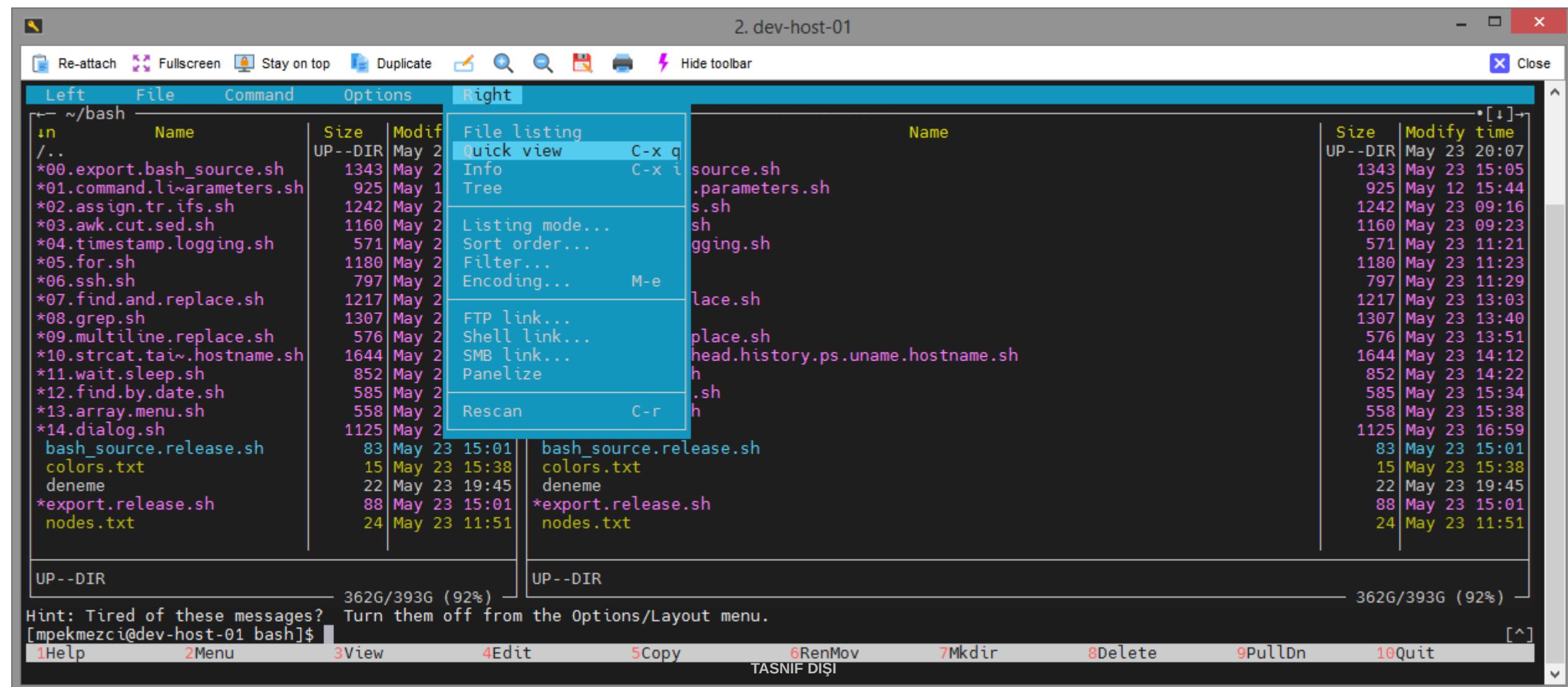
MC

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



MC

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



Ok tuşları ile sağ menüdeki bir dosya seçili “F4” tuşuna basınca edit moduna geçilir (VI'dan daha kolaydır ☺)

The screenshot shows the Midnight Commander (MC) interface. On the left, there's a file list in a tree view. The current directory is `~/bash`. A file named `*03.awk.cut.sed.sh` is selected. The right pane displays the contents of this file, which is a shell script. At the bottom, there's a terminal window showing a command-line session.

File List (Left Pane):

| Path | 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.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 |

Terminal Window (Bottom):

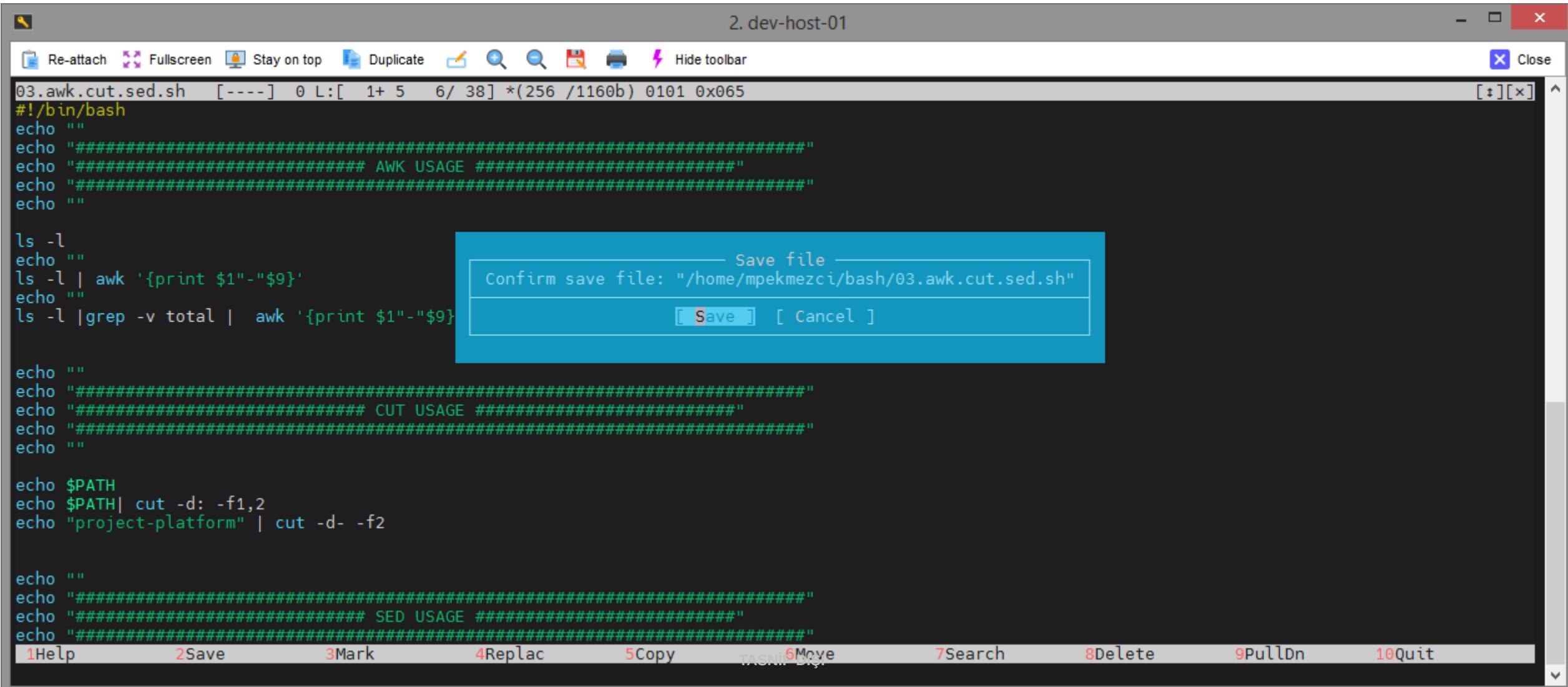
```
2. dev-host-01
[~] Re-attach Fullscreen Stay on top Duplicate Hide toolbar Close
Left File Command Options Right
~/bash
/home/mpekmezci/bash/03.awk.cut.sed.sh 694/1160 59%
#!/bin/bash
echo ""
echo #####
echo ##### AWK USAGE #####
echo #####
ls -l
echo ""
ls -l | awk '{print $1"-"$9}'
echo ""
ls -l | grep -v total | awk '{print $1"-"$9}'

echo ""
echo #####
echo ##### CUT USAGE #####
echo #####
echo $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]$ [^]
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.



BASH

MAY 2022

PEKMEZCI

TASNİF DIŞI

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.

EXPORT VARIABLES / BASH_SOURCE

```

echo "#####
echo "##### EXPORT #####"
echo "##### MYVAR variable in export.release.sh : -- $MYVAR --"
echo ""
MYVAR="VALUE1"
echo "
echo "MYVAR variable in main script : $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 "##### MYVAR variable in main script : $MYVAR"
echo "#####
echo "
echo "CURRENT_DIR=$( 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

#####

CURRENT_DIR variable in main script : /home/mpekmmezci/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
}
exit 1
$#, $?, $!
-lt, -gt, -eq, -le, -ge

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"

```

```

[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/dri1
/var/tmp/mpekmezci/dri1/file2
/var/tmp/mpekmezci/dri1/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/dri1
[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/dri1
[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_dri1
[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]$ 

```

TASNİF DIŞI

ASSIGN / TR / IFS

```
#!/bin/bash
echo "#####
echo "##### ASSIGN OUTPUT OF A COMMAND TO A VARIABLE #####
echo "#####"
echo "#####"
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 "#####"
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 "#####"
echo " word1
word1.1
word1.2
word2.1
word2.2
word2.3
word1 word1.1 word1.2
word2.1 word2.2 word2.3

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
```

TASNİF DIŞI

AWK / CUT / SED

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

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

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

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

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

/home/mpekmezci/.local/bin/home/mpekmezci/bin/opt/havelsan/ldk11/jdk11.0.9/bin/opt/havelsan/
eclipse:/opt/gradle/gradle-7.4.2/bin:/opt/eclipse/eclipse/srclocal/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

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.2022052311212
Content:

Content:
dev-host-01

FOR

```

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

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

echo ""
echo "#####
echo "##### FOR USAGE 2 #####
echo "#####
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 DIS

SSH

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

ssh-keygen

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

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

/var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1014/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.v20200705-1014/license.html
##### /var/tmp/eclipse/org.eclipse.equinox.p2.repository_packaging.html><a href="http://eclipse.org/equinov/p2/repository_packaging.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.repository_packaging.html><a href="http://eclipse.org/equinov/p2/repository_packaging.html">
#####
##### /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.v20200705-1014/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/equinov/p2/repository_packaging.html"><a href="http://eclipse.org/equinov/p2/
##### repository_packaging.html"/>
##### href="http://eclipse.org/equinov/p2/repository_packaging.html"><a href="http://eclipse.org/equinov/p2/
##### repository_packaging.html"/>
##### href="http://eclipse.org/equinov/p2/repository_packaging.html"><a href="http://eclipse.org/equinov/p2/
##### repository_packaging.html"/>
##### href="http://eclipse.org/equinov/p2/repository_packaging.html"><a href="http://eclipse.org/equinov/p2/
##### repository_packaging.html"/>
##### href="http://eclipse.org/equinov/p2/repository_packaging.html"><a href="http://eclipse.org/equinov/p2/
##### repository_packaging.html"/>
```

TASNİF DIŞI

GREP

```
#####
######## 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 #####
#####

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

#####
######## DISCOVERY #####
#####

/[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"

#####
######## EXTRAS #####
#####

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

#####
######## FEATURES #####
#####

/[var/tmp/eclipse/org.eclipse.equinox.p2.features.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.features.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>

#####
######## WARRANTY #####
#####

/[var/tmp/eclipse/org.eclipse.equinox.p2.discovery.feature_1.2.700.v20200705-1016/
feature.properties:featureName=Equinox_p2_Discovery_Ul_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 MULTILINE REPLACEMENT #####
echo #####
echo "deneme1
deneme2
deneme3
deneme4
deneme5" >/var/tmp/test.replace.txt
cat /var/tmp/test.replace.txt
echo "
echo #####
echo #####
echo #####
echo #####
echo #####
perl -p -e 's/deneme2\ndeneme3/DENEME/ims' /var/tmp/test.replace.txt
cat /var/tmp/test.replace.txt
```

```
#####
##### PERL MULTILINE REPLACEMENT #####
#####

deneme1
deneme2
deneme3
deneme4
deneme5

#####
DENEME
deneme4
deneme5
```

TASNİF DIŞI

STRCAT / HISTORY / PS / PGREP / UNAME / HOSTNAME

```
#!/bin/bash
echo ""
echo ""
echo "##### STRING CONCAT #####"
echo "##### $STR1 $STR2 #####"
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 "##### $HISTFILE #####"
echo ""
echo ""

history | tail -5

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

pgrep -fU mpekmzed
echo ""
echo "##### $PSR #####"
echo ""
ps -ef | grep mpek | tail -3

echo ""
echo "##### UNAME #####"
echo "##### $UNAME #####"
echo ""
echo ""

uname -a

echo ""
echo "##### HOSTNAME #####"
echo "##### $HOSTNAME #####"
echo ""
echo ""

hostname
```

```
#####
##### STRING CONCAT #####
#####
##### HISTORY #####
#####
##### PS-EF vs pgrep -fU #####
#####
##### 477665 sshd
##### 477672 bash
##### 477735 cshd
##### 477741 sttp-server
##### 513236 10.strat-tail.
##### 1780322 systemd
##### 1780333 (sd-pam)
##### 1780411 dbus-daemon

#####
##### mpekm#*+ 1780322 1 0 Jan23 ? 00:00:01 /usr/lib/systemd/systemd --user
mpekm#*+ 1780333 1780322 0 Jan23 ? 00:00:00 (sd-pam)
mpekm#*+ 1780411 1780322 0 Jan23 ? 00:00:00 /usr/bin/dbus-daemon --session --address=systemd:-
notork -modulide -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
```

WAIT / SLEEP

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

(for ((i=0;i<5;i+=1));do echo "A.$i"; sleep 1; done) &
(for ((i=0;i<5;i+=1));do echo "B.$i"; 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 "##### FIND BY DATE #####"
echo "##### FIND BY DATE #####"
echo "##### FIND BY DATE #####"
echo ""

date > /var/tmp/eclipse/file123

find /var/tmp/eclipse -mmin -10

# -10 -> son 10 dakika içinde değişen
# +10 -> 10 dakika önceşine git, u tarihten önce değişenleri getir
#   Yanlı -10 olarak yazılın 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

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

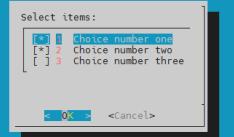
Enter your name: 
```

Do you really want to format the partition?

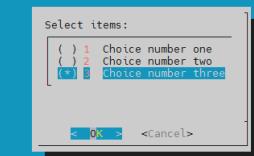
DIALOG

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

Select items:
 Choice number one
```



TASNİF DİŞİ



DIALOG

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



EDITORS

Vi
Mcedit

TASNİF DIŞI

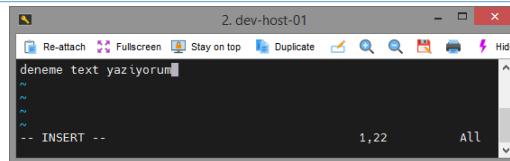
VI

The image shows two terminal windows side-by-side. The top window is titled "2. dev-host-01" and shows a command line prompt: "[mpekmezci@dev-host-01 bash]\$ vi deneme". The bottom window is also titled "2. dev-host-01" and shows a file named "deneme" [New File] with some initial characters (~) and status information: "0,0-1" and "All".

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

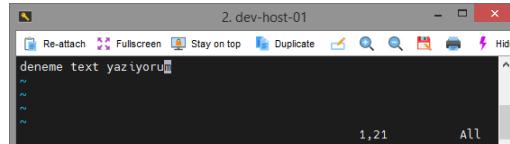
The image shows a single terminal window titled "2. dev-host-01". It displays the same file content as the previous screenshot, but now it is in insert mode, indicated by the text "-- INSERT --" at the bottom left. The status bar at the bottom right shows "0,1" and "All".

VI



```
deneme text yazıyorum
~ ~ ~
-- INSERT --          1,22      All
```

Klavede **Esc** tuşuna basınca, aşağıdaki gibi "Escape" moda geçiyoruz, artık yazamayız.



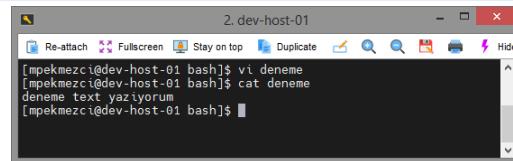
```
deneme text yazıyorum
~ ~ ~
1,21      All
```

Klavede "**:wq**" yazınca, aşağıdaki gibi dosya içine mevcut memory'deki halini yazar. (NOT: ":" karakterini de bizim yazmamız gereklidir, kendisi yazmaz.)



```
deneme text yazıyorum
~ ~ ~
:TASNİF DIŞI
```

VI



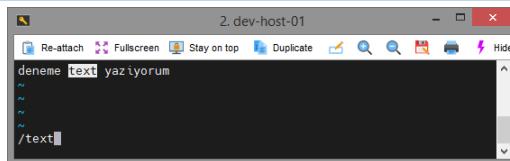
A screenshot of a terminal window titled "2. dev-host-01". The window has a toolbar with icons for Re-attach, Fullscreen, Stay on top, Duplicate, and Hide. The terminal content shows a user session:

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

TASNİF DIŞI

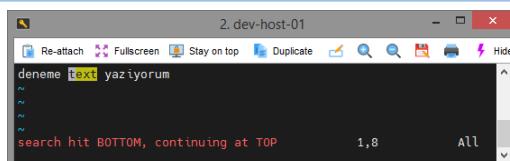
VI - SEARCH

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



A screenshot of a terminal window titled "2. dev-host-01". The command "deneme text yazıyorum" has been typed. The cursor is at the end of the command. Below it, the command "/text" is typed. The terminal shows several '^' symbols indicating previous commands or history.

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

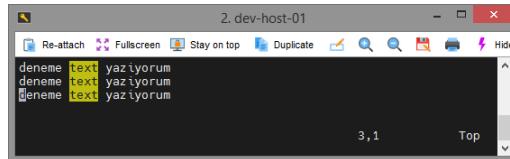


A screenshot of a terminal window titled "2. dev-host-01". The command "deneme text yazıyorum" has been typed. The cursor is at the end of the command. Below it, the command "/text" is typed. The terminal shows several '^' symbols indicating previous commands or history. At the bottom, the output "search hit BOTTOM, continuing at TOP" is displayed, along with the numbers "1,8" and "All".

TASNİF DIŞI

VI – COPY – PASTE – DELETE

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



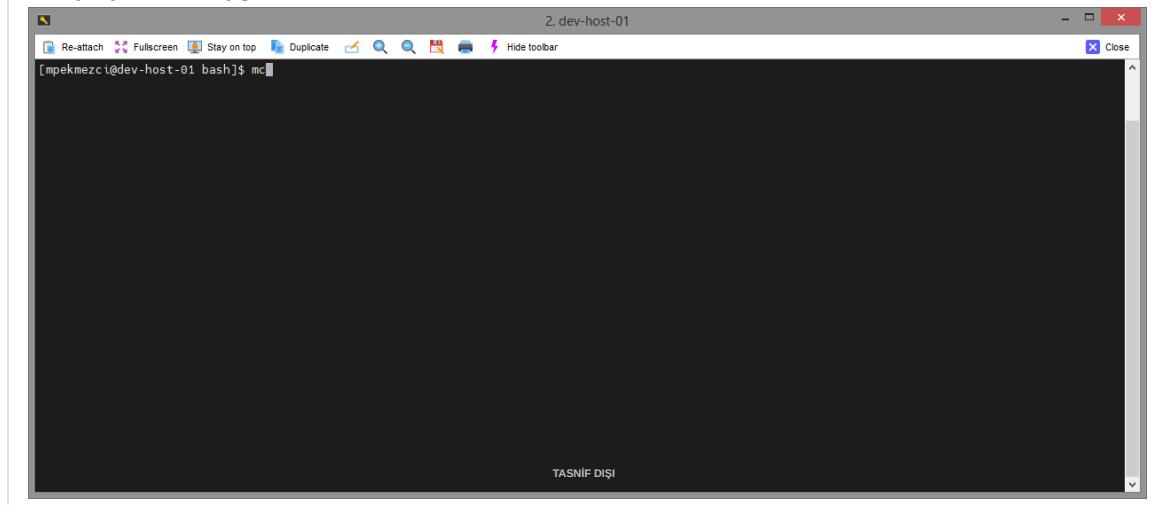
Klavede "p" tuşuna basarsak da ilgili satırı bir altına paste eder.

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.

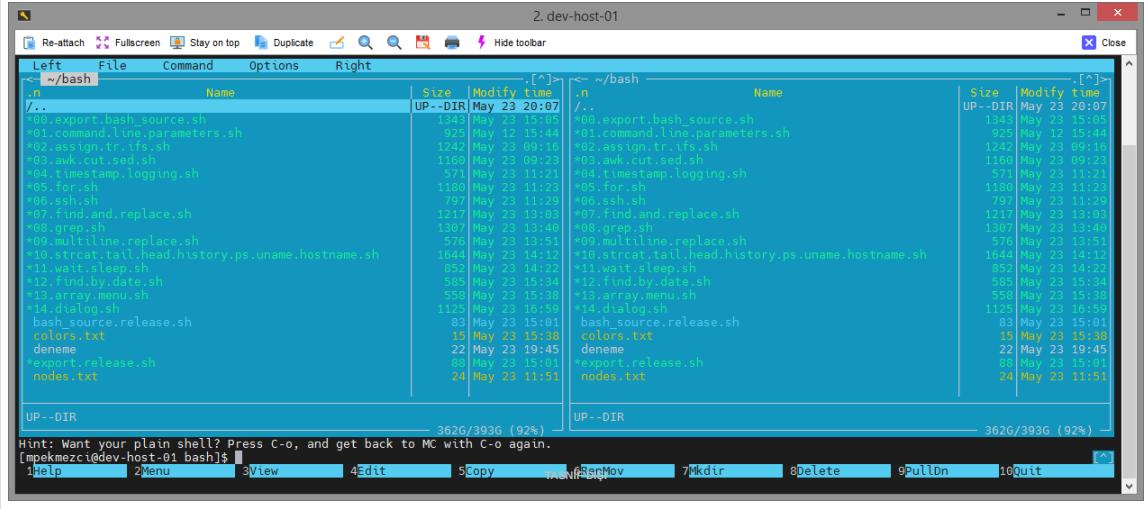
MC

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



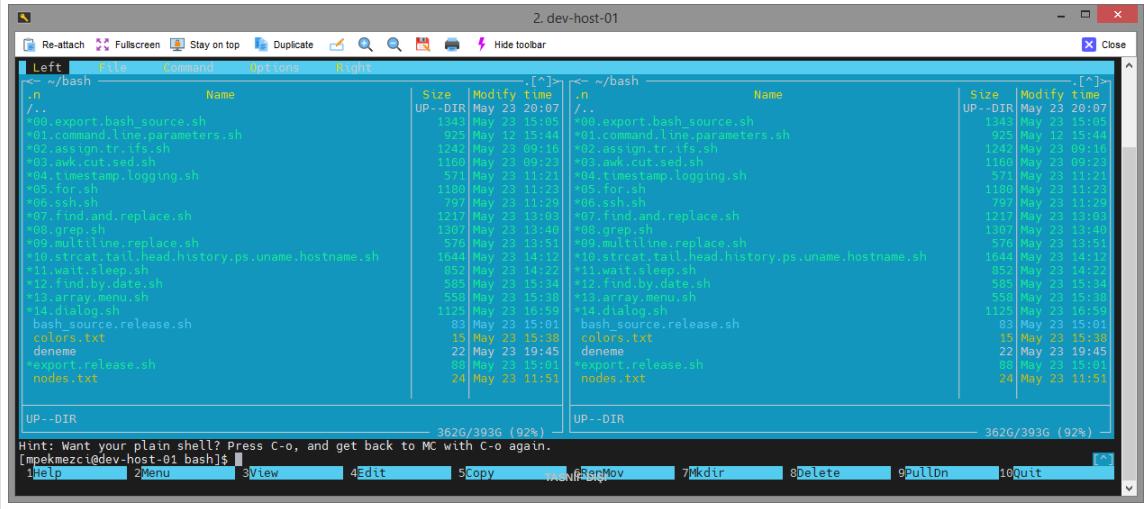
MC

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



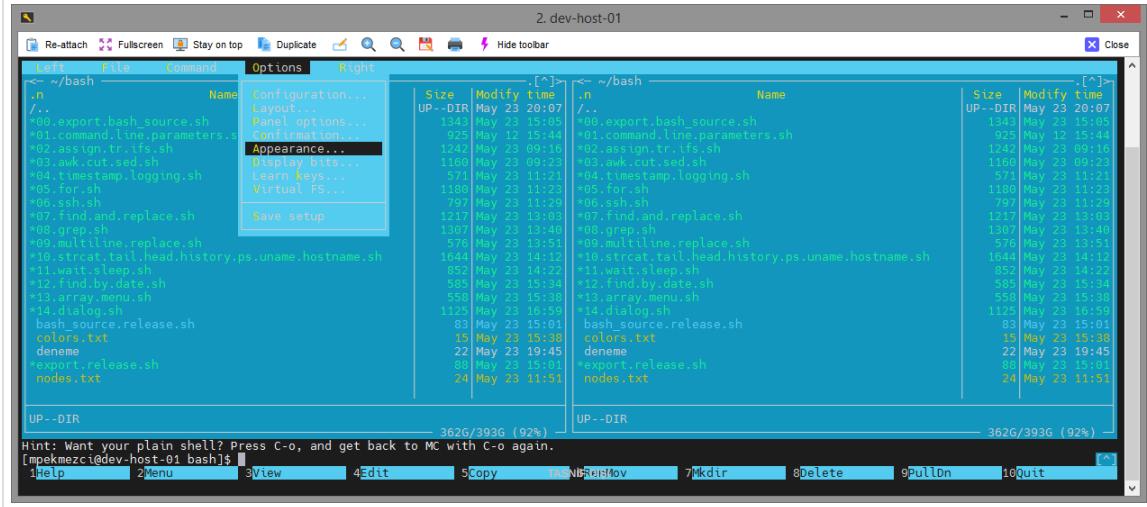
MC

F9 tuşuna basıncı yukarıdaki menüye geçilir.



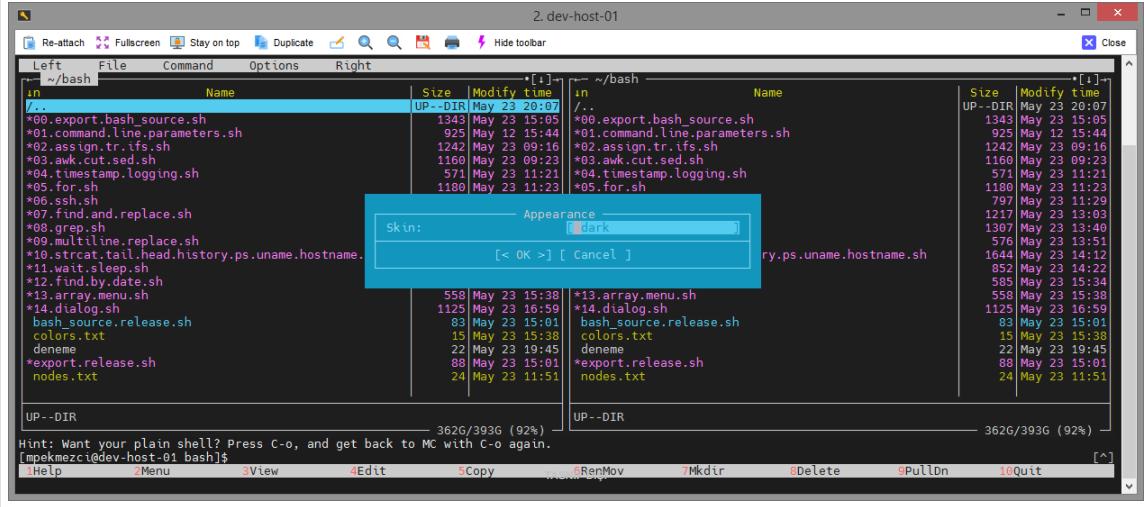
MC

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



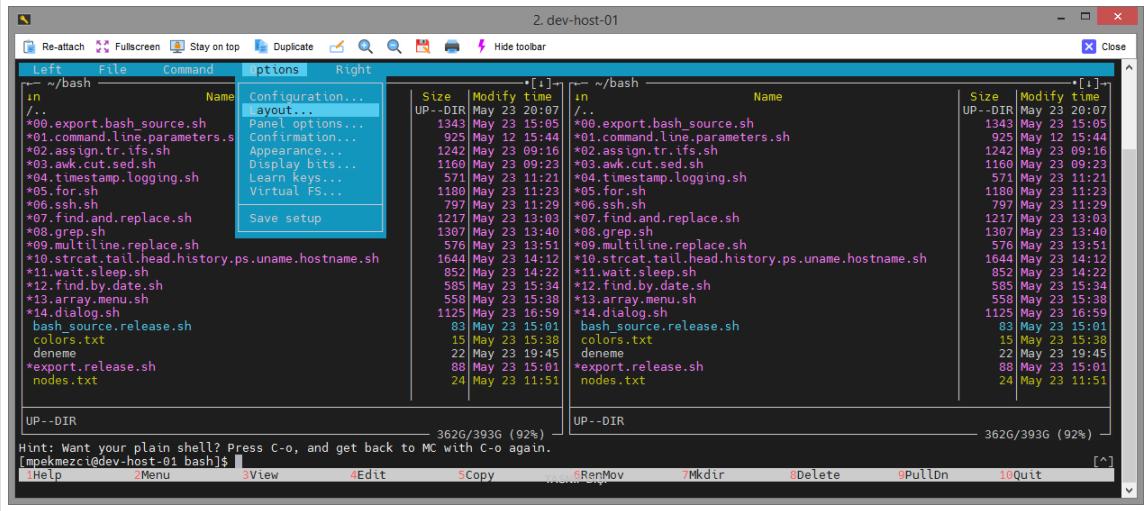
MC

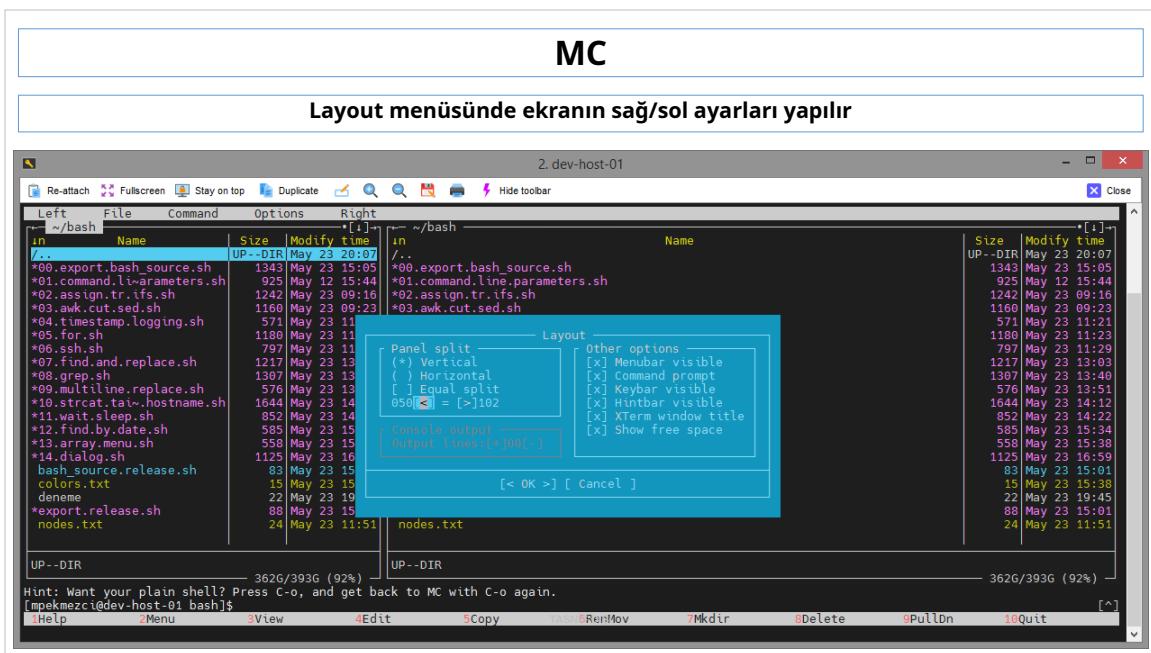
Seçim yapıldıktan sonra TAB ile “OK” butonun üstüne gelinir ve “Enter” tuşuna basılır.



MC

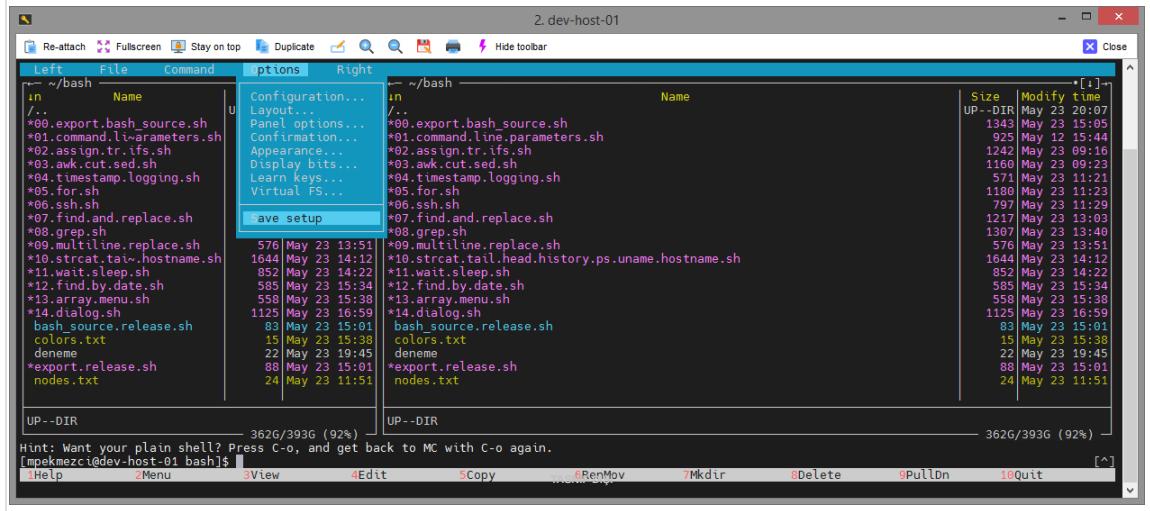
Layout menüsünde ekranın sağ/sol ayarları yapılır





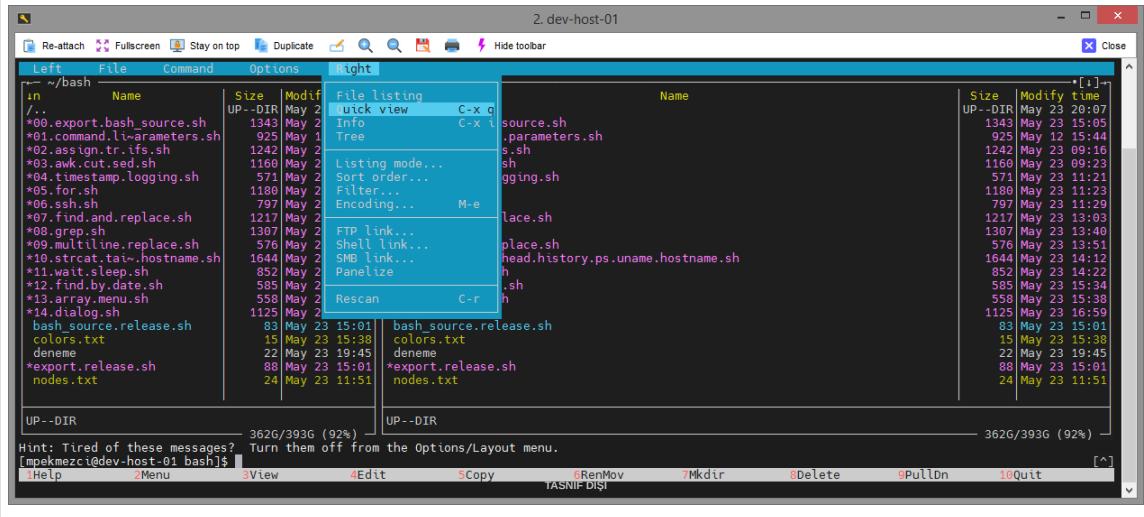
MC

Yapılan ayarlar aşağıdaki gibi save edilir.



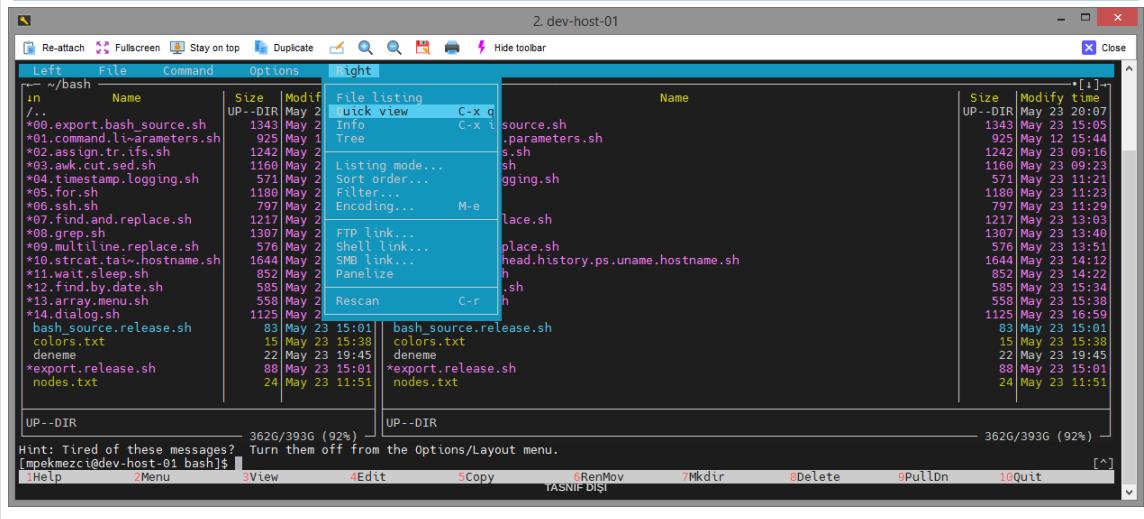
MC

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



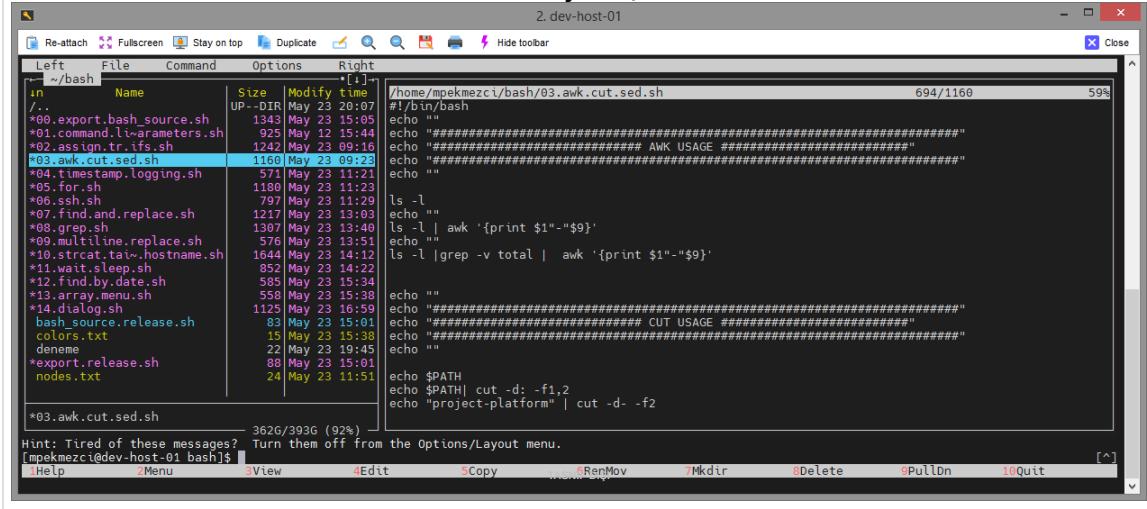
MC

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



MC

Ok tuşları ile sağ menüdeki bir dosya seçiliğinde F4 tuşuna basıncı edit moduna geçilir (VI'dan daha kolaydır ☺)



MC

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

