

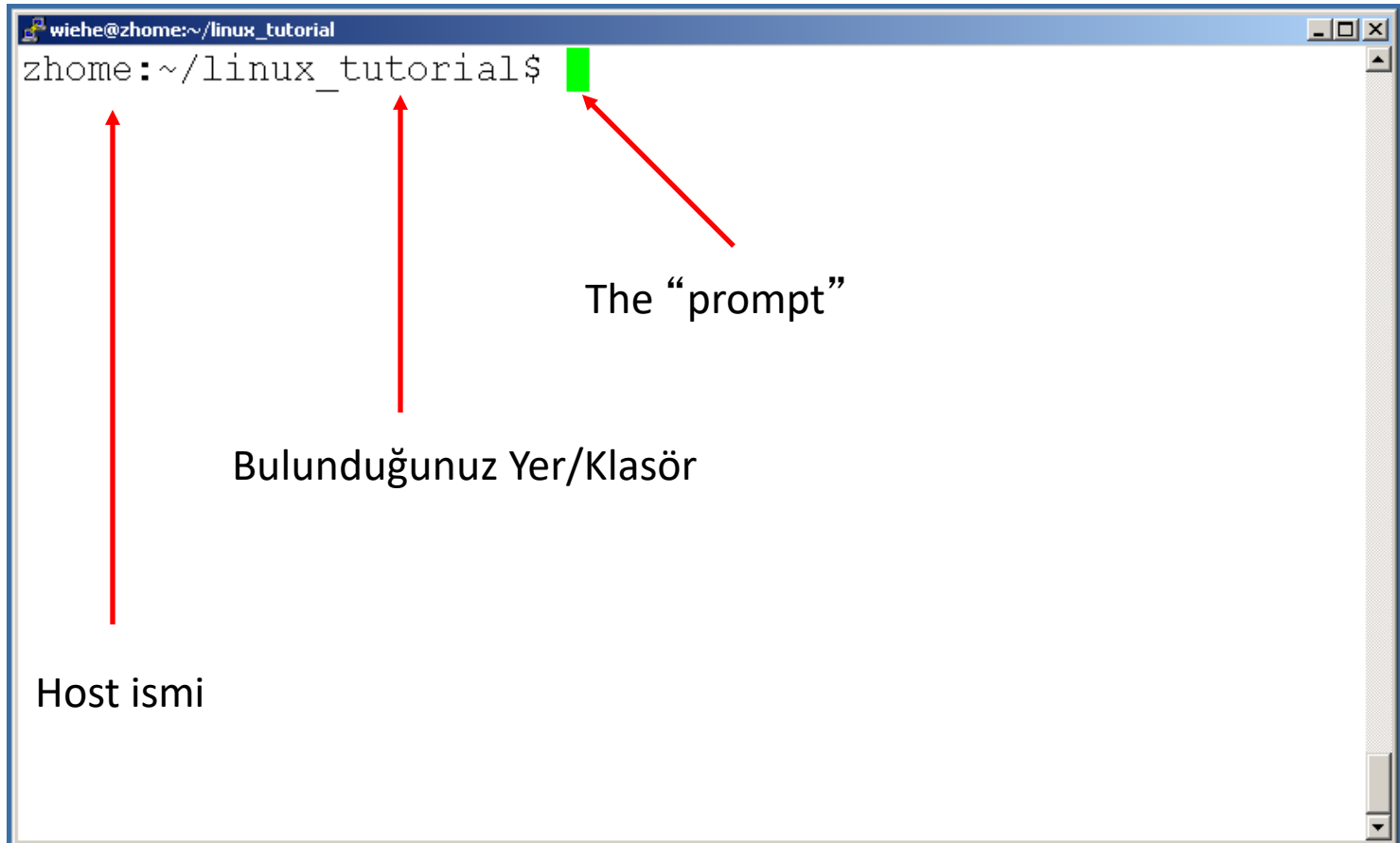
# UBUNTU/LINUX

## Başlangıç Dersi

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# Komut Satırı /Command Line



The image shows a terminal window with the title bar "wiehe@zhome:~/linux\_tutorial". The command prompt is "zhome:~/linux\_tutorial\$". A green cursor is positioned at the end of the prompt. Three red arrows point from text labels below to parts of the prompt: one from "Host ismi" to "zhome", one from "Bulduğunuz Yer/Klasör" to "~/linux\_tutorial", and one from "The 'prompt'" to the "\$" symbol.

```
wiehe@zhome:~/linux_tutorial
zhome:~/linux_tutorial$
```

Host ismi

Bulduğunuz Yer/Klasör

The "prompt"

# Temel Komutlar

- **ls**
  - \$ ls -l
  - \$ ls -a
  - \$ ls -la
  - \$ ls -l --sort=time ya da -lt
  - \$ ls -l --sort=size -r
- **cd**
  - \$ cd /usr/bin
- **pwd**
  - \$ pwd
- **~**
  - \$ cd ~
- **~user**
  - \$ cd ~weesan <Kullanıcı Adı>
  - “\*” opsiyonunu kullanabilirsiniz
  - <tab> tuşu yarım kalan isimleri tamamlar
- **which**
  - \$ which ls
- **whereis**
  - \$ whereis ls
- **locate**
  - \$ locate stdio.h
  - \$ locate iostream
- **rpm**
  - \$ rpm -q bash
  - \$ rpm -qa
  - \$ rpm -qa | sort | less
- **find**
  - \$ find / | grep stdio.h
  - \$ find /usr/include | grep stdio.h

# Temel Komutlar

- echo
  - \$ echo "Hello World"
  - \$ echo -n "Hello World"
- cat
  - \$ cat /etc/motd
  - \$ cat /proc/cpuinfo
- cp
  - \$ cp foo bar
  - \$ cp -a foo bar
- mv
  - \$ mv foo bar
- mkdir
  - \$ mkdir foo
- rm
  - \$ rm foo
  - \$ rm -rf foo
  - \$ rm -i foo
  - \$ rm -- -foo
- chgrp
  - \$ chgrp bar /home/foo
- chsh
  - \$ chsh foo
- chfn
  - \$ chfn foo
- chown
  - \$ chown -R foo:bar /home/foo

# Temel Komutlar

- tar
  - `$ tar cvfp lab1.tar lab1`
- gzip
  - `$ gzip -9 lab1.tar`
- untar & ungzp
  - `$ gzip -cd lab1.tar.gz | tar xvf -`
  - `$ tar xvfz lab1.tar.gz`
- touch
  - `$ touch foo`
  - `$ cat /dev/null > foo`
- Pipe
  - `$ cal > foo`
  - `$ cat /dev/zero > foo`
  - `$ cat < /etc/passwd`
  - `$ who | cut -d' ' -f1 | sort | uniq | wc -l`
- backtick
  - `$ echo "The date is `date`"`
  - `$ echo `seq 1 10``
- Hard, soft (symbolic) link
  - In `vmlinuz-2.6.24.4 vmlinuz`
  - In `-s firefox-2.0.0.3 firefox`

# Dosya İzinleri

Linuxte dosyalar kullanıcılara göre özel izin seviyelerine sahiptir. Bu seviyeler;

- “r” yani “read only”
- “w” yani “write”
- “x” yani “execute”
  - Örneğin klasörler için x seviyesi klasör içindeki dosyaların gösterilmesi anlamına gelir.

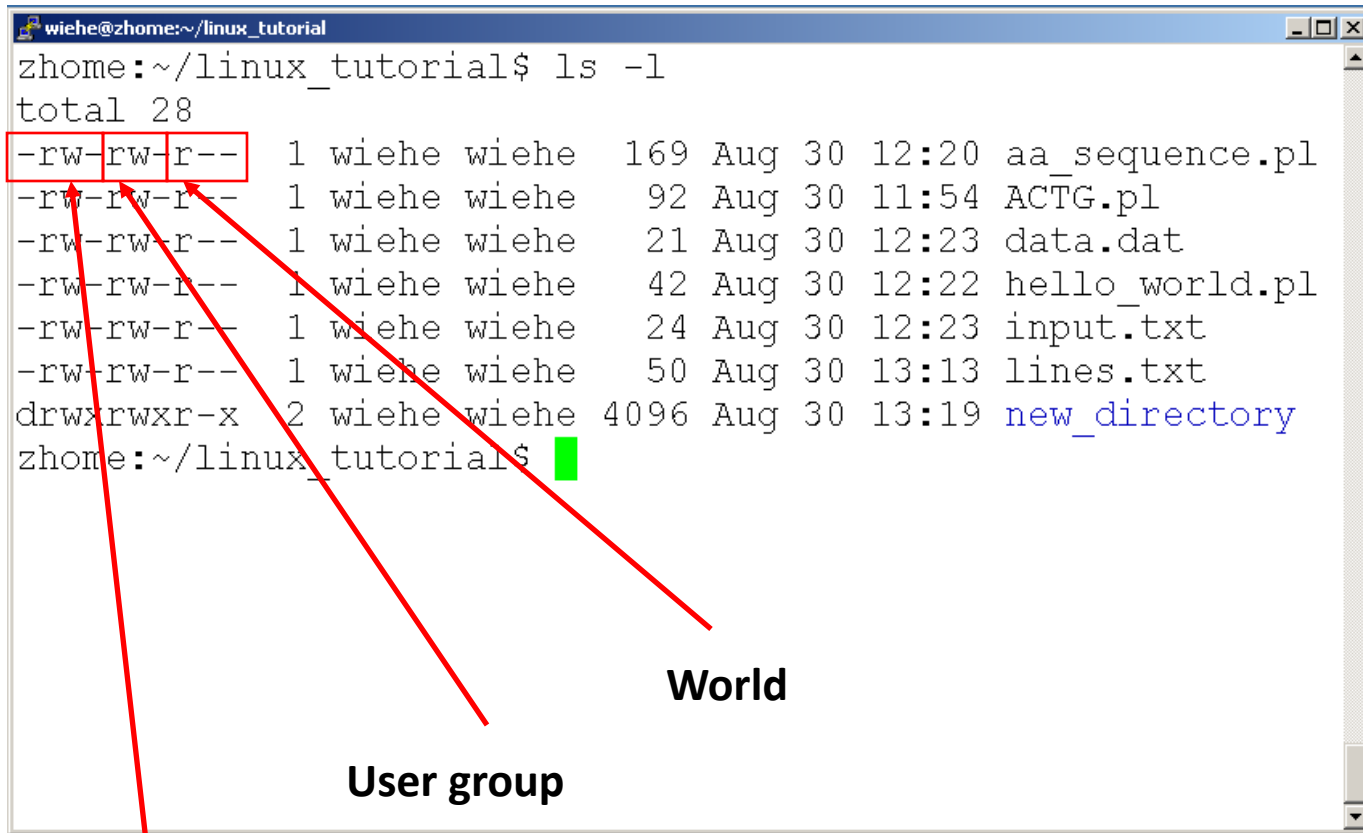
# Dosya İzinleri

```
wiehe@zhome:~/linux_tutorial
zhome:~/linux_tutorial$ ls -l
total 28
-rw-rw-r-- 1 wiehe wiehe 169 Aug 30 12:20 aa_sequence.pl
-rw-rw-r-- 1 wiehe wiehe 92 Aug 30 11:54 ACTG.pl
-rw-rw-r-- 1 wiehe wiehe 21 Aug 30 12:23 data.dat
-rw-rw-r-- 1 wiehe wiehe 42 Aug 30 12:22 hello_world.pl
-rw-rw-r-- 1 wiehe wiehe 24 Aug 30 12:23 input.txt
-rw-rw-r-- 1 wiehe wiehe 50 Aug 30 13:13 lines.txt
drwxrwxr-x 2 wiehe wiehe 4096 Aug 30 13:19 new_directory
zhome:~/linux_tutorial$
```

User (you)

User group

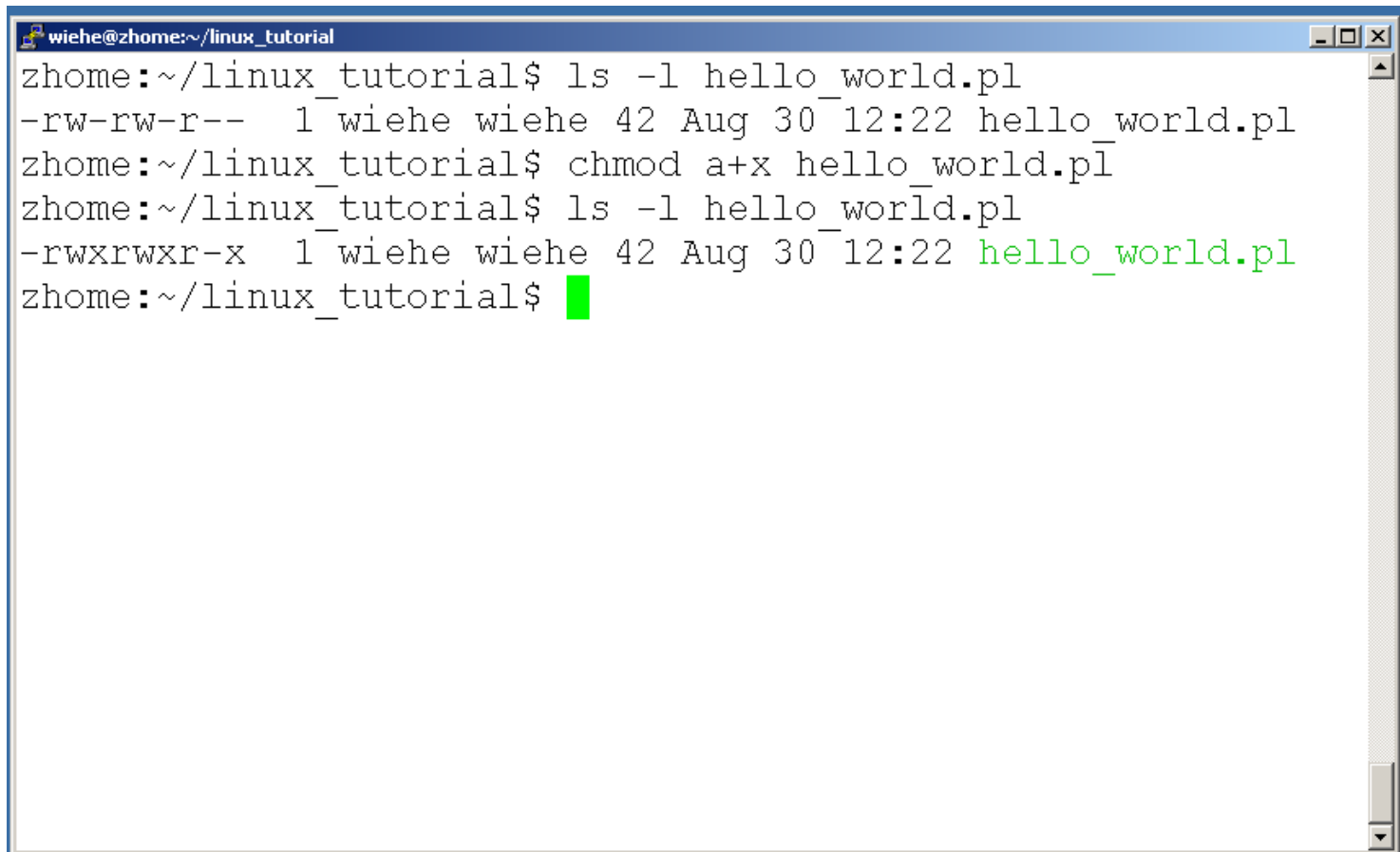
World



# Dosya İzinleri / Chmod komutu

Syntax: chmod [**u**ser/**g**roup/**o**thers/**a**ll]+[permission] [file(s)]

Aşağıda bir dosya için nasıl tüm kullanıcılara çalıştırma izinlerinin açıldığını göreceksiniz:

A terminal window titled 'wiehe@zhome:~/linux\_tutorial' showing a sequence of commands and their outputs. The first command is 'ls -l hello\_world.pl', which outputs '-rw-rw-r-- 1 wiehe wiehe 42 Aug 30 12:22 hello\_world.pl'. The second command is 'chmod a+x hello\_world.pl'. The third command is 'ls -l hello\_world.pl', which outputs '-rwxrwxr-x 1 wiehe wiehe 42 Aug 30 12:22 hello\_world.pl'. The fourth line shows the prompt 'zhome:~/linux\_tutorial\$' with a green cursor.

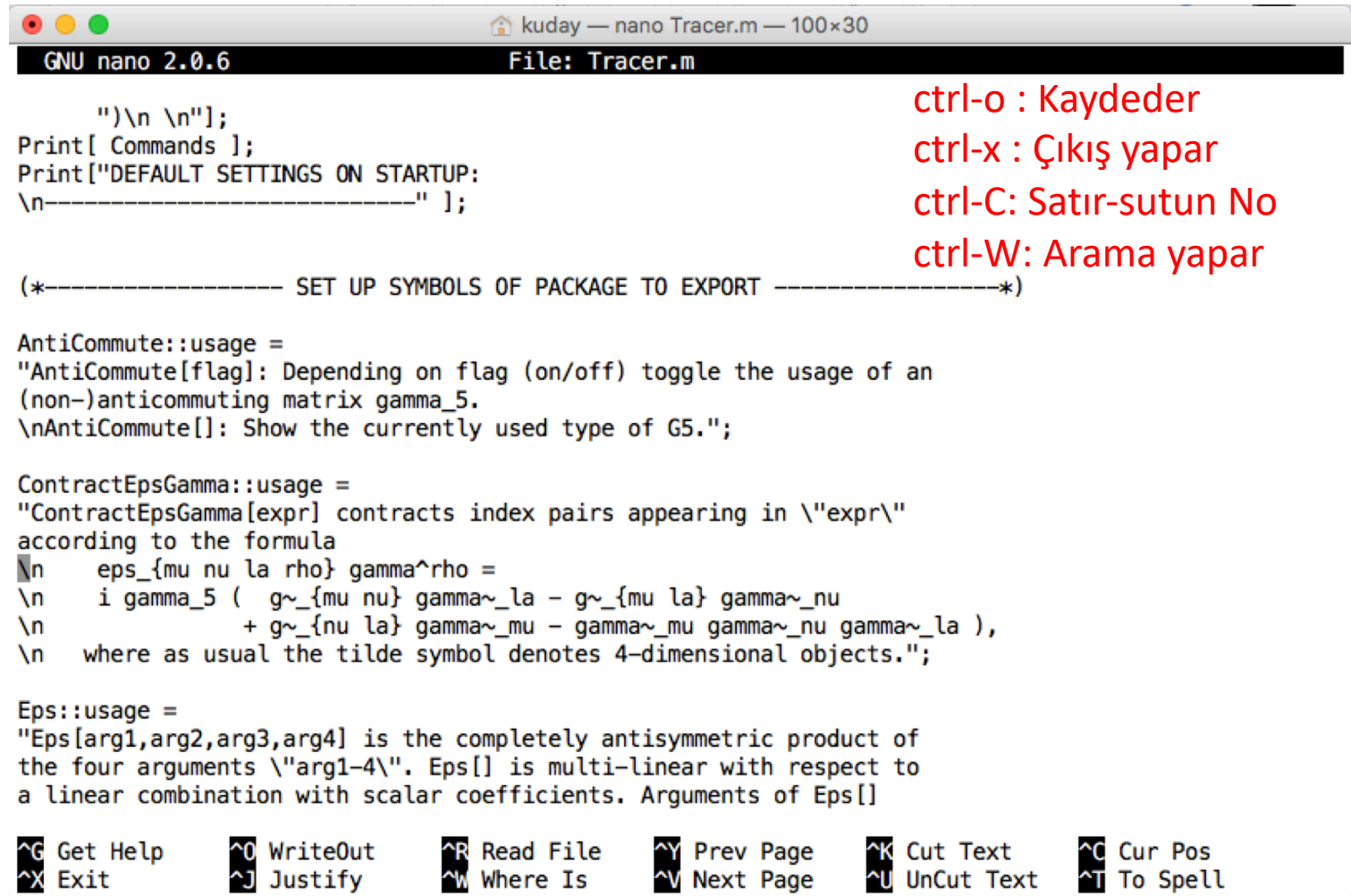
```
wiehe@zhome:~/linux_tutorial
zhome:~/linux_tutorial$ ls -l hello_world.pl
-rw-rw-r-- 1 wiehe wiehe 42 Aug 30 12:22 hello_world.pl
zhome:~/linux_tutorial$ chmod a+x hello_world.pl
zhome:~/linux_tutorial$ ls -l hello_world.pl
-rwxrwxr-x 1 wiehe wiehe 42 Aug 30 12:22 hello_world.pl
zhome:~/linux_tutorial$
```



# Vi Editörü

- 2 modes
  - Input mode
    - ESC to back to cmd mode
  - Command mode
    - Cursor movement
      - h (left), j (down), k (up), l (right)
      - ^f (page down)
      - ^b (page up)
      - ^ (first char.)
      - \$ (last char.)
      - G (bottom page)
      - :l (goto first line)
    - Swtch to input mode
      - a (append)
      - i (insert)
      - o (insert line after)
      - O (insert line before)
- Delete
  - dd (delete a line)
  - d10d (delete 10 lines)
  - d\$ (delete till end of line)
  - dG (delete till end of file)
  - x (current char.)
- Paste
  - p (paste after)
  - P (paste before)
- Undo
  - u
- Search
  - /
- Save/Quit
  - :w (write)
  - :q (quit)
  - :wq (write and quit)
  - :q! (give up changes)

# Nano Editörü (Daha kolay bir editör!)



```
GNU nano 2.0.6 File: Tracer.m

    "\n \n");
Print[ Commands ];
Print["DEFAULT SETTINGS ON STARTUP:
\n-----" ];

(*----- SET UP SYMBOLS OF PACKAGE TO EXPORT -----*)

AntiCommute::usage =
"AntiCommute[flag]: Depending on flag (on/off) toggle the usage of an
(non-)anticommuting matrix gamma_5.
\nAntiCommute[]: Show the currently used type of G5.";

ContractEpsGamma::usage =
"ContractEpsGamma[expr] contracts index pairs appearing in \"expr\"
according to the formula
\n eps_{mu nu la rho} gamma^rho =
\n i gamma_5 ( g_{mu nu} gamma~_la - g_{mu la} gamma~_nu
\n + g_{nu la} gamma~_mu - gamma~_mu gamma~_nu gamma~_la ),
\n where as usual the tilde symbol denotes 4-dimensional objects.";

Eps::usage =
"Eps[arg1,arg2,arg3,arg4] is the completely antisymmetric product of
the four arguments \"arg1-4\". Eps[] is multi-linear with respect to
a linear combination with scalar coefficients. Arguments of Eps[]

^G Get Help      ^O WriteOut     ^R Read File    ^Y Prev Page    ^K Cut Text     ^C Cur Pos
^X Exit          ^J Justify      ^W Where Is    ^V Next Page    ^U UnCut Text   ^T To Spell
```

ctrl-o : Kaydeder  
ctrl-x : Çıkış yapar  
ctrl-C: Satır-sutun No  
ctrl-W: Arama yapar