

# Shell History and Autocompletion

# What You Will Learn

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Shell History

Exclamation Mark Syntax

Autocompletion

# Shell History

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Executed commands are added to the history.  
Shell history can be displayed and recalled.  
Shell history is stored in memory and on disk.

- ~/.bash\_history

- ~/.history

- ~/.histfile

# history Command

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`history`      Displays the shell history.

`HISTSIZE`      Controls the number of commands to retain in history.

`export HISTSIZE=1000`

# ! Syntax

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!N Repeat command line number N.

!! Repeat the previous command line.

!string Repeat the most recent command starting with "string."

# More ! Syntax

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`! :N <Event> <Separator> <Word>`

`!` Represents a command line (or event).

`!` = The most recent command line.

`!` = `!!`

`:N` Represents a word on the command line.

0 = command, 1 = first argument, etc.

# ! Syntax Examples

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```
$ head files.txt sorted_files.txt notes.txt  
<Output from head command here>
```

```
$ !!
```

```
head files.txt sorted_files.txt notes.txt  
<Output from head command here>
```

```
$ vi !:2
```

```
vi sorted_files.txt  
<vi editor starts>
```

# Even More ! Syntax

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`!^` Represents the first argument.

`!^ = !:1`

`!$` Represents the last argument.

```
$ head files.txt sorted_files.txt notes.txt
```

`!^ = files.txt`

`!$ = notes.txt`



# Searching Shell History

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<code>Ctrl-r</code>	Reverse shell history search
<code>Enter</code>	Execute the command
<code>Arrows</code>	Change the command
<code>Ctrl-g</code>	Cancel the search

# Tab Completion

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Tab autocompletion

Commands

Files, directories, paths

Environment Variables

Username (~)

# Demo

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# Summary

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