

Second Session

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Bash for Archivists

Part 1: Beginner Level
23rd and 25th June 2020

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- parsing input and formatting output
- flow control: branching with «if»
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Handouts

- presentations
- video podcasts
- code of the scripts
- bibliography

→ reto.ch/training/2020/202006/
→ avpres.net/Bash/

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our working environment

```
cd ~/Desktop  
nano script  
chmod +x script  
.script
```

drag-and-drop_script

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built-in commands (1)

```
#!/path_to_shell
#!/path_to_programming_Language

#!/bin/sh
#!/bin/bash
#!/usr/bin/env bash
```

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built-in commands (2)

```
cd path
echo string
exit value
read variable
```

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external commands

```
ffmpeg options arguments
ffplay options arguments
ffprobe options arguments

grep options pattern file
```

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syntax for an **if** statement

```
if condition ; then
    command
elif condition_n ; then
    command_n
else
    command
fi
```

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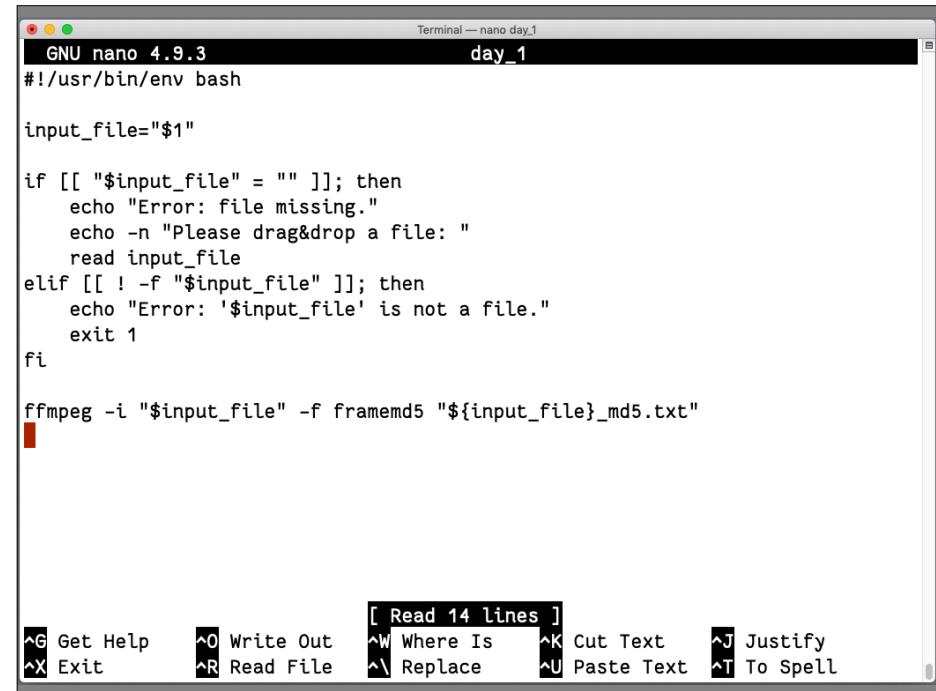
typical use of an **if** statement

```
if ! data_valid ; then  
    error_processing  
else  
    normal_processing  
fi
```

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```
1 #!/usr/bin/env bash  
2  
3 input_file="$1"  
4  
5 if [[ "$input_file" = "" ]]; then  
6     echo "Error: file missing."  
7     echo -n "Please drag&drop a file: "  
8     read input_file  
9 elif [[ ! -f "$input_file" ]]; then  
10    echo "Error: '$input_file' is not a file."  
11    exit 1  
12 fi  
13  
14 ffmpeg -i "$input_file" -f framemd5 "${input_file}_md5.txt"  
15
```

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```
GNU nano 4.9.3 Terminal — nano day_1  
#!/usr/bin/env bash  
  
input_file="$1"  
  
if [[ "$input_file" = "" ]]; then  
    echo "Error: file missing."  
    echo -n "Please drag&drop a file: "  
    read input_file  
elif [[ ! -f "$input_file" ]]; then  
    echo "Error: '$input_file' is not a file."  
    exit 1  
fi  
  
ffmpeg -i "$input_file" -f framemd5 "${input_file}_md5.txt"
```

The terminal window shows the script being edited in nano. The status bar at the bottom indicates "Read 14 lines". The menu bar shows "GNU nano 4.9.3" and "Terminal — nano day_1". The bottom of the window has a menu bar with various keyboard shortcuts for file operations like Get Help, Write Out, Where Is, Cut Text, Exit, Read File, Replace, Paste Text, and To Spell.

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