Notes 4

File system

- **Definition**
- determines the file type
- **Usage**
- `man` + `option`
- **Example**
- `pwd`
- `cd ~/Downloads`
- `ls -a`
-

pathname

- **Definition**
- indicates the location of a file in the filesystem
- **Usage**
- `Pathname`
- **Example**
- `cd /home/user/`
- `cd Documents`
- `ls documents /`

Absolute path

- **Definition**
- the location of a file starting the root of the file system.
- **Usage**
- `$path` + `$Home`
- **Example**
- `cd /home/user/Documents`
- `/home/arjon-adili/Downloads/cat.jpeg`
- `/home/user/documents`

Relative path

- **Definition**
- Location of a file starting from the current directory
- **Usage**
- `Path`
- **Example**
- Downloads/song.mp3
- `cd ../..`
- `cd ../Projects`

- `ls ../Projects`

parent directory

- **Definition**
- a directory containing one or more directories and files
- **Usage**
- `echo` + `cd` + `ls`
- **Example**
- `cd "/home/user"`
- `cd ..`
- `ls ../../`

child directory or subdirectory

- **Definition**
- A directory inside another directory
- **Usage**
- `Directory`
- **Example**
- `cd subdirectory_name`
- `cd /home/user/Documents/subdirectory_name`
- `ls -R`

Bash special characters

- **Definition**
- Special characters are function like commands that tell the shell to perform a specific action
- **Usage**
- `Bash`
- **Example**
- `/`
- `.`
- `..`

environment variables

- **Definition**
- stores values of users environment and can be used in shell commands
- **Usage**
- `$path` + `$Home`
- **Example**
- `echo $USER`
- `printenv`
- `$Home`

user defined variables

- **Definition**
- User-defined variables are variables that are created by the user within a Bash script or on the command line
- **Usage**
- User + echo
- **Example**
- #echo "My shell is: $SHELL"\
- #echo "My home is: $HOME"
- #echo "My name is:"

The difference between Your Home directory and The Home directory

- Your Home directory is specific to your user information while The Home directory is the Root where every home directory is located

Why do we need to use $ with the variables in bash shell scripting

- The $ symbol needs to be used with variables and the home directory becuase it is crucial for displaying the value of variables