# Labs - Variables and Algo

Astier Guillaume, Lefebvre Loic, Morit Luca

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# Contents

# Environment variables

- Display all of your environment variables.

- Give the meaning of PATH, PS1, HOME, and TERM

- Create a variable PS1_COPY to store the actual $PS1 value

- Try to change PS1 in your current SHELL by "Hello type a SHELL command $"

- Using the $PS1_COPY reinitialize your PS1 environment variable to the last value # TP_Protect_a_variable

- Define a variable MyVar with a value of "ISEN"

- Display the value of MyVar with the SHELL command echo

- How could you display the string "ISEN is good for you" using the variable MyVar ?

- Now display in one command echo, the name of the variable MyVar and her value. Example : "$MyVar = ISEN"

- Use the following command : `ls | wc -l` and store the result in a variable named LS_COUNT.

# TP_Scripting_Base

- Explain the result of the following script:

```
1  #!/bin/bash
2  MyVar="I am a variable"
3  MyScript=$(basename $0)
4  echo -e "My script name is $MyScript\n and my var is $MyVar"
```

- Write a script which sorts in alphabetical order all keyboard entries up to the JAIFINI string
- Write a script which asks the user's last name, first name and preferred color and which answers (for each information, a specific question must be asked): `Hello Mr. <NAME> <Firstname>. I agree with you. The color <COLOR> is a very nice color.` # Scripting Base

## Test

> Write a script that indicates if the first argument is greater than the second.

## Read

> Write a script which asks the user for 2 numbers and tells the user if the first is greater than the second (obligation: read).

# Algo

## Calculator : case

> Write a script that realizes a calculator. (obligation: case).

## File Type : if/elif/else

> Write a script to identify the type of file given in argument. (type = symbolic link/regular file/ directory/other; oblication : if/elif/else )

## Backup : for/find

> Write a script that creates a backup copy, suffixed by '-old', of all files in the folder given as argument. The backup should be recursive and only files. (obligation: for/find)

**Game : while/read**

> Write a script that randomly chooses a number between 1 and 50. And asks the user to find
> it. With each proposal, indicate to the user if the number to find is higher/lower. (obligation :
> while/read)

## TP_Process_Management

- Start the command `sleep` 9999. How to regain access to the console without stopping the command?
- How do I know if the previous command still works?
- Start the command `sleep` 9999. How to regain access to the console and quitting the process?
- What is the solution to launch the command `sleep` 9999 while immediately recovering control on the console but that the command continues to work.