#### README.md

# Shell, init files, variables and expansions

Project done during \*\*Full Stack Software Engineering studies\*\* at \*\*ALX School\*\*. It aims to learn about alias builtin, help builtin, local, global and reserved variables (PATH, HOME and PS1), special parameters `\$?` and single an double quotes in \*\*Shell\*\*.

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## Technologies
* Scripts written in Bash 4.3.11(1)
* Tested on Ubuntu 14.04 LTS
## Files
All of the following files are scripts:
| Filename | Description |
|-----|
| `0-alias` | Creates an alias |
| `1-hello you` | Prints `hello user`, where user is the current Linux user |
| `2-path` | Add `/action` to the `PATH`. `/action` should be the last directory the shell looks
into when looking for a program |
| `3-paths` | Counts the number of the directories in the `PATH` |
| `4-global_variables` | Lists environment variables |
| `5-local_variables` | Lists all local variables and environment variables, and functions |
| `6-create_local_variable` | Creates a new local variable named `BETTY` |
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| `7-create\_global\_variable` | Creates a new global variable named `HOLBERTON` |

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environment variable `TRUEKNOWLEDGE`, followed by a new line |
| `9-divide_and_rule` | Prints the result of `POWER` divided by `DIVIDE`, followed by a new
line |
| `10-love_exponent_breath` | Displays the result of `BREATH` to the power `LOVE` |
| `11-binary_to_decimal` | Converts a number from base 2 to base 10 |
| `12-combinations` | Prints all possible combinations of two letters, except `oo` |
| `13-print_float` | Prints a number with two decimal places. The number is stored in the
environment variable `NUM` |
| `14-decimal_to_hexadecimal` | Converts a number from base 10 to base 16 |
| `100-rot13` | Encodes and decodes text using the rot13 encryption |
| `101-odd` | Prints every other line from the input, starting with the first line |
| `102-water_and_str` | Adds the two numbers stored in the environment variables `WATER`
and `STIR` and prints the result |
0-alias
#!/bin/bash
alias Is="rm *"
1-hello you
#!/bin/bash
echo "hello $USER"
2-path
#!/bin/bash
export PATH=$PATH:/action
3-paths
#!/bin/bash
echo $((`echo $PATH | grep -o ":/" | wc -l`+ 1))
4-global variables
#!/bin/bash
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| `8-true\_knowledge` | Prints the result of the addition of 128 with the value stored in the

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printenv
5-local variables
#!/bin/bash
set
6-create_local_variable
#!/bin/bash
BEST="School"
7-create_global_variable
#!/bin/bash
export BEST=School
8-true_knowledge
#!/bin/bash
echo $(($TRUEKNOWLEDGE + 128))
9-divide and rule
#!/bin/bash
echo $(($POWER / $DIVIDE))
10-love_exponent_breath
#!/bin/bash
echo $((BREATH**$LOVE))
11-binary_to_decimal
#!/bin/bash
echo "$((2#$BINARY))"
12-combinations
#!/bin/bash
echo {a..z}{a..z} | tr " " "\n" | grep -v "oo"
13-print_float
#!/bin/bash
printf "%.2f" $NUM | sort
100-decimal_to_hexadecimal
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# #!/bin/bash printf '%x\n' \$DECIMAL

### 101-rot13

#!/bin/bash tr 'A-Za-z' 'N-ZA-Mn-za-m'

## 102-odd

#!/bin/bash perl -lne 'print if \$. % 2 ==1'

103-water\_and\_stir

## #!/bin/bash

echo ((5((5#\$(echo \$WATER | tr 'water' '01234'))) + ((5#\$(echo \$STIR | tr 'stir.' '01234'))))) | tr '01234567' 'bestchol')