Report for Lab Work 05: Linux/UNIX Shell Environment Variables

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| **Student Name Surname** | **Student ID (nV)** | **Date** |
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3.1. Table. Shell Environment Variables Analyze.

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Short Description | Type:ro-wr | Your Linux Value |
| PATH |  |  |  |
| HOME |  |  |  |
| TERM |  |  |  |
| PS1 |  |  |  |
| PS2 |  |  |  |
| LOGNAME | Login User Name (account) | WR | stud |
| MAIL |  |  |  |
| MAILCHEK |  |  |  |
| HOSTNAME |  |  |  |
| HOSTTYPE |  |  |  |
| HISTSIZE |  |  |  |
| HISTFILE |  |  |  |
| TMOUT |  |  |  |
| IGNOREEOF |  |  |  |
| IFS |  |  |  |
| SECONDS |  |  |  |
| OSTYPE |  |  |  |
| PWD |  |  |  |
| OLDPWD |  |  |  |
| EDITOR |  |  |  |
| RANDOM |  |  |  |
| SHLVL |  |  |  |
| SHELL |  |  |  |
| PROMPT\_COMMAND | Define a command that is executed every time before showing PS1.  For PS1, PS2, PS3, and PROMPT\_COMMAND, dynamically calculated escape sequences exist, such as:  \w - current directory, full path;  \W - current directory, without path;  \u - username; \h - hostname;  \$ - $ for user and # for root;  \t is the time of day; \d - current date;  \s - the current shell; and others. | WR | “Is -l” |
| EUID |  |  |  |
| PPID |  | RO |  |
| GROUPS |  |  |  |

3.2. Screenshot with Your Config-file content and working Clock.

3.3. Text Copy for Your Variant Nr of Task.

**Your Variant Number.** For example, Li Yurijs 🡪 LIYURIJS 🡪 (12 + 09 + 25 + 21 +18 + 09 + 10)mod10 + 1 = 104mod10 + 1 = 4 +1 = 5

**Hints for You.**

You need modify 3 files (˜/.bash\_profile, ˜/.bashrc, ˜/.bash\_logout).

Hint for a). You will need use: echo, cal -3, $LOGNAME to modify the ~/.bach\_profile file.

Hint for b). You will need use: echo, $LOGNAME, $SECONDS, sleep to modify the ~/.bash\_logout.

Hint for c). You will need use: echo, $PROMPT\_COMMAD, $PS1 to modify the ~/.bashrc file.

Hint for d). You will need use: different variables, commands and constructions to make a special value of PS1 on ~/.bashrc file.

Hint for e), You will need use: ESC-codes to control the foregroung console colors – man 4 console \_codes.

Hint for f). You will need use: ESC-codes to control the background console colors – man 4 console \_codes.

Hint for g). You will need: export command to modify the ~/.bashrc file.

**v00. For All. Change the configuration files of your shell (example, bash) as follows:**

a) At the beginning of the work session (after login procedure), a greeting should be displayed in the following format:

Hello UserName!

Next is the Calendar for the previous, current and next months in one line (cal -3).

b) At the end of the work session (after the exit command), a farewell should be displayed for 5 seconds in the following format:

Goodbye, UserName! You worked s seconds ($SECONDS).

where UserName is the user login name.

**v0X. Change the configuration files of your shell (example, bash) as follows:**

c) A user’s primary prompt (PS1) should be dynamically changing (recalculated after each press of the Enter key);

d) PS1 format:

…

…

e) …

f) …

g) PS1 must be inherited in child shells.

3.4. Text Copy of Your Modification for 3 Configuration Files  
with the necessary comments:

˜/.bash\_profile,

˜/.bashrc,

˜/.bash\_logout.