

## SISTEMAS OPERACIONAIS - 18/11/2020

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**ra:** 02201000

**Turma:** Turma

### Atividade 2 - Print de Tela - Script

#### Instalando o shell csh:

```
sudo apt-get install csh
```

```
a02201000@HSL042:~$ sudo apt-get install csh
[sudo] senha para a02201000:
Lendo listas de pacotes... Pronto
Construindo árvore de dependências
Lendo informação de estado... Pronto
csh is already the newest version (20110502-2.1ubuntu1).
O seguinte pacote foi instalado automaticamente e já não é necessário:
  snap-confine
Utilize 'sudo apt autoremove' para o remover.
0 pacotes atualizados, 0 pacotes novos instalados, 0 a serem removidos e 24 não atualizados.
a02201000@HSL042:~$
```

#### Exibindo a variáveis de ambiente globais:

```
env
```

```
a02201000@HSL042:~$ env
TERM=xterm-256color
SHELL=/bin/bash
OLDPWD=/home/urubu100
NAME=HSL042
USER=a02201000
LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd=40;33;01:cd=40;33;01:or=40;31;01:mi=00:su=37;41:sg=
30;43:ca=30;41:tw=30;42:ow=34;42:st=37;44:ex=01;32:*.tar=01;31:*.tgz=01;31:*.arc=01;31:*.arj=01;31:*.taz=01;31:*.lha=01;
31:*.lz4=01;31:*.lzh=01;31:*.lzma=01;31:*.tlz=01;31:*.txz=01;31:*.tzo=01;31:*.t7z=01;31:*.zip=01;31:*.z=01;31:*.Z=01;31:
*.dz=01;31:*.gz=01;31:*.lrz=01;31:*.lz=01;31:*.lzo=01;31:*.xz=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=01;31:*.tbz2=01;31:*.tz
=01;31:*.deb=01;31:*.rpm=01;31:*.jar=01;31:*.war=01;31:*.ear=01;31:*.sar=01;31:*.rar=01;31:*.alz=01;31:*.ace=01;31:*.zoo
=01;31:*.cpio=01;31:*.7z=01;31:*.rz=01;31:*.cab=01;31:*.jpg=01;35:*.jpeg=01;35:*.gif=01;35:*.bmp=01;35:*.pbm=01;35:*.pgm
=01;35:*.ppm=01;35:*.tga=01;35:*.xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35:*.png=01;35:*.svg=01;35:*.svgz=01;35:*.m
ng=01;35:*.pcx=01;35:*.mov=01;35:*.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;35:*.webm=01;35:*.ogm=01;35:*.mp4=01;35:*.
m4v=01;35:*.mp4v=01;35:*.vob=01;35:*.qt=01;35:*.nuv=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc=01;35:*.
avi=01;35:*.fli=01;35:*.flv=01;35:*.gl=01;35:*.dl=01;35:*.xcf=01;35:*.xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.o
gv=01;35:*.ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.m4a=00;36:*.mid=00;36:*.midi=00;36:*.mka=00;36:*.mp3=00;36:*.
mpc=00;36:*.ogg=00;36:*.ra=00;36:*.wav=00;36:*.oga=00;36:*.opus=00;36:*.spx=00;36:*.xspf=00;36:
HOSTTYPE=x86_64
MAIL=/var/mail/a02201000
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
PWD=/home/a02201000
LANG=pt_BR.UTF-8
HOME=/home/a02201000
SHLVL=2
LOGNAME=a02201000
LESSOPEN=| /usr/bin/lesspipe %s
LESSCLOSE=/usr/bin/lesspipe %s %s
_=usr/bin/env
a02201000@HSL042:~$
```

Ativar o Win

#### Exibindo a quantos segundos estamos com o bash ativo:

```
a02201000@HSL042:~$ echo $SECONDS
189
a02201000@HSL042:~$
```

```
echo $SECONDS
```

### Abrindo o bash:

bash

```
a02201000@HSL042:~$ bash
a02201000@HSL042:~$
```

### Exibindo a quantidade de bash que estão ativo:

ps

```
a02201000@HSL042:~$ ps
  PID TTY          TIME CMD
   550 tty1        00:00:00 bash
   580 tty1        00:00:00 bash
   591 tty1        00:00:00 ps
a02201000@HSL042:~$
```

### Exibindo o shell padrão:

echo \$SHELL

```
urubu100@HSL042:~$ echo $SHELL
/bin/bash
urubu100@HSL042:~$
```

### Criando uma var local e atribui valor:

Script1='marcelo'

```
urubu100@HSL042:~$ Script1='marcelo'
urubu100@HSL042:~$
```

### Mostrando o conteúdo da variável criada:

echo \$Script1

### Criando um novo processo bash filho e exibindo os dois processos:

bash

ps

```
urubu100@HSL042:~$ bash
urubu100@HSL042:~$ ps
  PID TTY          TIME CMD
    2 tty1        00:00:00 bash
   592 tty1        00:00:00 bash
   602 tty1        00:00:00 ps
urubu100@HSL042:~$
```

### Mostrando o conteúdo da variável, só que agora em outra bash:

echo \$Script1

```
urubu100@HSL042:~$ echo $Script1
urubu100@HSL042:~$
```

**Saindo do bash atual, mostrando a quantidade de bash ativos e mostrando o conteúdo da variável:**

```
exit
```

```
ps
```

```
echo $Script1
```

```
urubu100@HSL042:~$ exit
exit
urubu100@HSL042:~$ ps
  PID TTY          TIME CMD
    2 tty1      00:00:00 bash
   603 tty1      00:00:00 ps
urubu100@HSL042:~$ echo $Script1
'marcelo'
urubu100@HSL042:~$
```

**Exportando o Script1, acessando um novo bash, mostrando a quantidade de bash ativos e exibindo o conteúdo da variável:**

```
urubu100@HSL042:~$ export Script1
urubu100@HSL042:~$ bash
urubu100@HSL042:~$ ps
  PID TTY          TIME CMD
    2 tty1      00:00:00 bash
   604 tty1      00:00:00 bash
   614 tty1      00:00:00 ps
urubu100@HSL042:~$ echo $Script1
'marcelo'
urubu100@HSL042:~$
```

```
export Script1
```

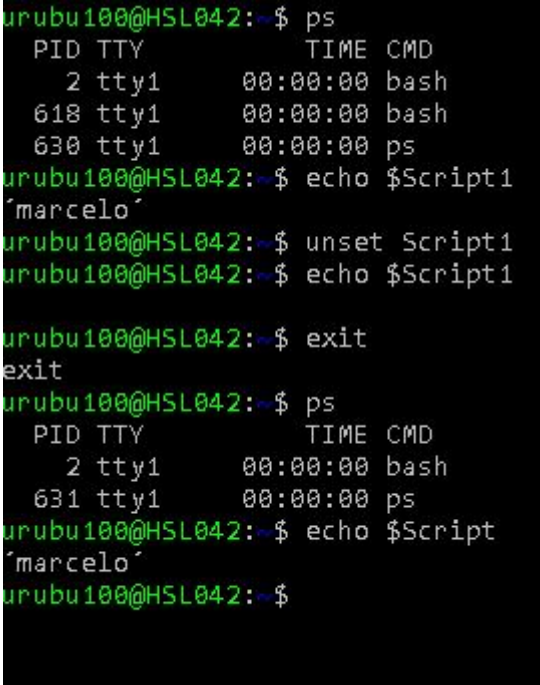
```
bash
```

```
ps
```

```
echo $Script1
```

**Executando dois bash, removendo a variável do bash filho, saindo do bash filho e verificando se a variável existe no dash pai:**

```
ps
echo $Script1
unset Script1
echo $Script1
exit
ps
echo $Script
```



The screenshot shows a terminal window with the following output:

```
urubu100@HSL042:~$ ps
  PID TTY          TIME CMD
    2 tty1      00:00:00 bash
   618 tty1      00:00:00 bash
   630 tty1      00:00:00 ps
urubu100@HSL042:~$ echo $Script1
'marcelo'
urubu100@HSL042:~$ unset Script1
urubu100@HSL042:~$ echo $Script1

urubu100@HSL042:~$ exit
exit
urubu100@HSL042:~$ ps
  PID TTY          TIME CMD
    2 tty1      00:00:00 bash
   631 tty1      00:00:00 ps
urubu100@HSL042:~$ echo $Script
'marcelo'
urubu100@HSL042:~$
```

The output demonstrates that the variable `Script1` is initially set to `'marcelo'`. After `unset Script1`, the echo command shows an empty string. Finally, after `exit`, the parent shell's `echo $Script` still shows `'marcelo'`, indicating that the variable was inherited from the parent.

**Removendo a variável de ambiente global Script1 e verificar se ela aparece no processo filho:**

```
bash
echo $Script1
ps
exit
echo $Script1
unset Script1
echo $Script1
bash
ps
echo $Script1
exit
ps
echo $Script1
```

```
urubu100@HSL042:~$ bash
urubu100@HSL042:~$ echo $Script1
'marcelo'
urubu100@HSL042:~$ ps
  PID TTY          TIME CMD
    2 tty1      00:00:00 bash
   634 tty1      00:00:00 bash
   644 tty1      00:00:00 ps
urubu100@HSL042:~$ exit
exit
urubu100@HSL042:~$ echo $Script1
'marcelo'
urubu100@HSL042:~$ unset Script1
urubu100@HSL042:~$ echo $Script1

urubu100@HSL042:~$ bash
urubu100@HSL042:~$ ps
  PID TTY          TIME CMD
    2 tty1      00:00:00 bash
   645 tty1      00:00:00 bash
   655 tty1      00:00:00 ps
urubu100@HSL042:~$ echo $script1

urubu100@HSL042:~$ exit
exit
urubu100@HSL042:~$ ps
  PID TTY          TIME CMD
    2 tty1      00:00:00 bash
   656 tty1      00:00:00 ps
urubu100@HSL042:~$ echo $Script1

urubu100@HSL042:~$
```

### Criando um array e navegando por ele com o índice:

```
script2=(azul amarelo verde vermelho)
```

```
echo $script2
```

```
echo ${script2[2]}
```

```
urubu100@HSL042:~$ script2=(azul amarelo verde vermelho)
urubu100@HSL042:~$ echo $script2
azul
urubu100@HSL042:~$ echo ${script2[2]}
verde
urubu100@HSL042:~$ echo ${script2[2]}
verde
urubu100@HSL042:~$ echo ${script2[*]}
azul amarelo verde vermelho
urubu100@HSL042:~$
```

### Modificando e removendo um elemento de nossa array:

```
script2[3]=branco
```

```
echo ${script2[*]}
```

```
unset script2[2]
```

```
echo ${script2[*]}
```

```
urubu100@HSL042:~$ script2[3]=branco
urubu100@HSL042:~$ echo ${script2[*]}
azul amarelo verde branco
urubu100@HSL042:~$ unset script2[2]
urubu100@HSL042:~$ echo ${script2[*]}
azul amarelo branco
urubu100@HSL042:~$
```