

Chapter 5 - Customizing Working Environment

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System Variables

```
$PS1 - Shell apperance  
$PS1 = '$ '
```

Output:

```
-bash: \u@\h:\w\$: command not fo  
21170004@comunix:~$ PS1='$'  
$
```

```
$PATH - executables
```

Local/environment Variable

Local variable: affects current shell only

Environment variable: affects sub-shell as well

```
$ a = 3 #local variable  
$ export a # exposes variable
```

Example:

```
$ a=3; b=5  
$ echo $a $b # 3, 5  
$ export b  
$ sh // start sub-shell  
$ echo $a #no result  
$ echo $b #5  
$ exit #return to parent shell
```

Variable Commands

```
$ set # see all variables and its values  
$ set | grep PATH # shows the value of the PATH variable  
$ env # lists exported variables  
$ echo $variable # shows variable value
```

```
$ export # makes a variable an env variable
$ unset # delete variable
```

Absolute/Relative Path

- Absolute Path
 - Starts with the root path (/)
 - Example: /usr/bin/ls
- Relative Path:
 - does not start with /
 - references to the current directory
 - Example ../dir/hi.txt

. : Current directory .. : Parent directory ~ : User's home directory

Shell Types

- Bourne Shell (sh)
 - Original Unix shell
- C Shell (csh)
 - Syntax as the C programming language
- Korn Shell (ksh)
 - Combines sh and csh and has some additional functions
- Bourne Again Shell (bash)
 - same as sh but has additional functions

Shell initialization files

/etc/profile: global configuration file

Sh: ~/.profile

Ksh: ~/.profile, ~/.kshrc

Bash: ~/.bashrc_profile

Alias

```
$ alias ls='ls -l' # Substituting one term to another
$ unalias ls
```