1.

- The main and most basic function of the Make tool is to describe the relationship between source programs and automatically maintain the compilation work through makefiles.

- When the make command is first executed, it scans the Makefile to find the target and its dependencies. If these dependencies are targets themselves, continue to scan the Makefile for these dependencies to build their dependencies and then compile them. Once the main dependencies are compiled, the main target is then compiled (this is passed in via the make command).

Now, suppose you make a modification to a source file, and you execute the make command again, it will only compile the object files related to that source file, so after compiling the final executable saved a lot of time.

- make compile |directly execute make |Generate .o files, and target executable files.

2.

-Yes

chsh allows you to change your default login shell. It prompts you for the full pathname of the new shell, which is then used as your shell for subsequent logins.

3.

-Internal commands are part of the shell program. External command is the utility part in linux system. The biggest difference between internal commands and external commands is performance. Internal commands execute much faster than external commands because they are built into the shell and do not have to create extra processes. So just like executing a larger script, the execution consists of many Scripting of external commands can harm the script's.

4. Write a command pipeline to find files in a directory hierarchy (e.g. your home directory) that have been modified for past 30 days and compress them.

- find $HOME -mtime -2 -type f -print | tar -zcvf

5.

- None of the characters enclosed in‘’ have special meaning.

- The function of ‘‘ is command substitution. The content in backticks (``) is usually the command line. The program will execute the content in backticks first, and replace the content in backticks with the running result.

6.

- If it isn't a built-in command or a full pathname, the shell searches the directories whose names are stored in the PATH environment variable.

7. Describe in your own words on the difference between the Linux shell script and Perl language.

[各种脚本语言，比如shell和tcl、perl有啥区别呢?\_百度知道 (baidu.com)](https://zhidao.baidu.com/question/455244628.html)

[(35条消息) Perl和Shell区别\_coolmeme的博客-CSDN博客\_perl shell](https://blog.csdn.net/coolmeme/article/details/7045379)

perl: a feature-rich computer programming language that runs on over 100 computer platforms

Perl:l borrows the features of C, sed, awk, shell scripting language and many other programming languages, the most important feature is that it integrates the function of regular expressions and the huge third-party code base CPAN.

Shell: software (command parser) that provides users with an operating interface.

Shell: Interpret and execute commands entered by the user interactively or automatically interpret and execute a series of pre-set commands.

-Comparing the two, I feel that shell is more suitable for writing automated build scripts and system management scripts; Perl is suitable for writing data processing and cross-platform applications; writing code reuse modules;