**diff and patch Cheat Sheet**

**diff**

diff is used to find differences between two files. On its own, it’s a bit hard to use; instead, use it with diff -u to find lines which differ in two files:

**diff -u**

diff -u is used to compare two files, line by line, and have the differing lines compared side-by-side in the same output. See below:

~$ cat menu1.txt

Menu1:

Apples

Bananas

Oranges

Pears

~$ cat menu2.txt

Menu:

Apples

Bananas

Grapes

Strawberries

~$ diff -u menu1.txt menu2.txt

--- menu1.txt   2019-12-16 18:46:13.794879924 +0900

+++ menu2.txt   2019-12-16 18:46:42.090995670 +0900

@@ -1,6 +1,6 @@

-Menu1:

+Menu:

 Apples

 Bananas

-Oranges

-Pears

+Grapes

+Strawberries

**Patch**

Patch is useful for applying file differences. See the below example, which compares two files. The comparison is saved as a .diff file, which is then patched to the original file!

~$ cat hello\_world.txt

Hello World

~$ cat hello\_world\_long.txt

Hello World

It's a wonderful day!

~$ diff -u hello\_world.txt hello\_world\_long.txt

--- hello\_world.txt     2019-12-16 19:24:12.556102821 +0900

+++ hello\_world\_long.txt        2019-12-16 19:24:38.944207773 +0900

@@ -1 +1,3 @@

 Hello World

+

+It's a wonderful day!

~$ diff -u hello\_world.txt hello\_world\_long.txt > hello\_world.diff

~$ patch hello\_world.txt < hello\_world.diff

patching file hello\_world.txt

~$ cat hello\_world.txt

Hello World

It's a wonderful day!

There are some other interesting patch and diff commands such as patch -p1, diff -r !

Check them out in the following references:

* <http://man7.org/linux/man-pages/man1/diff.1.html>
* <http://man7.org/linux/man-pages/man1/patch.1.html>