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:

```
1
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~$ 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!

```
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```

```
18
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~$ 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 +090
0
@@ -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.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