TATA CONSULTANCY SERVICES

Experience certainty.

Confidentiality Statement

Tata Code of Conduct

We, in our dealings, are self-regulated by a Code of Conduct as enshrined in the Tata Code of Conduct. We request your support in helping us adhere to the Code in letter and spirit. We request that any violation or potential violation of the Code by any person be promptly brought to the notice of the Local Ethics Counselor or the Principal Ethics Counselor or the CEO of TCS. All communication received in this regard will be treated and kept as confidential.

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vILP – Level 2

Content Manual

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1. Filters

1.7 cut

This command cut is used for text processing. You can use this command to extract portion of text from a file by selecting columns.

Syntax:

cut –option filename

Example:

```
$cat test.txt
cat command for file oriented operations.
cp command for copy files or directories.
ls command to list out files and directories with its attributes.
```

Select Column of Characters

Extract only a desired column from a file use -c option. The following example displays 2nd character from each line of a file test.txt.

```
$ cut -c2 test.txt
a
p
s
```

As seen above, the characters a, p, s is the second character from each line of the test.txt file.

Select Column of Characters using Range

Range of characters can also be extracted from a file by specifying start and end position delimited with -. The following example extracts first 3 characters of each line from a file called test.txt

```
$cut -c1-3 test.txt
cat
cp
ls
```

Select Column of Characters using either Start or End Position

Either start position or end position can be passed to cut command with -c option. The following specifies only the start position before the '-'. This example extracts from 3rd character to end of each line from test.txt file.

```
$ cut -c3- test.txt
t command for file oriented operations.
 command for copy files or directories.
 command to list out files and directories with its attributes.
```

The following specifies only the end position after the '-'. This example extracts 8 characters from the beginning of each line from test.txt file.

```
$ cut -c-8 test.txt
cat comm
cp comma
ls comma
```

The entire line would get printed when you don't specify a number before or after the '-' as shown below.

```
$ cut -c- test.txt
cat command for file oriented operations.
cp command for copy files or directories.
ls command to list out files and directories with its attributes.
```

Select a Specific Field from a File

Instead of selecting x number of characters you can combine option -f and –d to extract a whole field,. The option -f specifies which field you want to extract, and the option -d specifies what delimiter that is used in the input file. The following example displays only first field of each lines from /etc/passwd file using the field delimiter**:** (colon). In this case, the 1st field is the username.

```
$ cut -d':' -f1 /etc/passwd
root
daemon
bin
sys
games
bala
```

1.8 paste

Tool for merging together different files into a single, multi-column file. In combination with cut, useful for creating system log files.

```
$cat items
 Alphabet blocks
 Building blocks
 Cables

$cat prices
$1.00/dozen
$2.50 ea.
$3.75

$paste items prices
 Alphabet blocks $1.00/dozen
 Building blocks $2.50 ea.
 Cables $3.75
```

1.9 join

Consider this a special-purpose cousin of paste. This powerful utility allows merging two files in a meaningful fashion, which essentially creates a simple version of a relational database.

The command join operates on exactly two files, but pastes together only those lines with a common tagged field (usually a numerical label), and writes the result to standard output. The files to be joined should be sorted according to the tagged field for the matchups to work properly.

```
$cat 1.data
100 Shoes
200 Laces
300 Socks

$cat 2.data
100 $40.00
200 $1.00
```

```
300 $2.00

$ join 1.data 2.data
 100 Shoes $40.00
 200 Laces $1.00
 300 Socks $2.00
```