1. cmp command in Linux/UNIX is used to compare the two files byte by byte and helps you to find out whether the two files are identical or not.
2. Options for cmp command.
3. -b(print-bytes) : If you want cmp displays the differing bytes in the output when used with -b option.
4. **Syntax:**
5. **cmp [OPTION]... FILE1 [FILE2 [SKIP1 [SKIP2]]]**

SKIP1 ,SKIP2 & OPTION are optional

and FILE1 & FILE2 refer to the filenames .

**$cmp file1.txt file2.txt**

1. **If the files are not identical :** the output of the above command will be :

**$cmp file1.txt file2.txt**

**file1.txt file2.txt differ: byte 9, line 2**

/\*indicating that the first mismatch found in

two files at byte 20 in second line\*/

1. **If the files are identical :** you will see something like this on your screen:

**$cmp file1.txt file2.txt**

**$ \_**

/\*indicating that the files are identical\*/

**Options for cmp command**

**1. -b(print-bytes) :** If you want cmp displays the differing bytes in the output when used with **-b** option.

//...cmp command used with -b option...//

**$cmp -b file1.txt file2.txt**

**file1.txt file2.txt differ: 12 byte, line 2 is 154 l 151 i**

/\* indicating that the difference is in 12

byte ,which is 'l' in file1.txt and 'i' in file2.txt.\*/

The values 154 and 151 in the above output are the values for these bytes, respectively. **2. -i [bytes-to-be-skipped] :** Now, this option when used with cmp command helps to **skip a particular number of initial bytes from both the files** and then after skipping it compares the files. This can be done by specifying the number of bytes as argument to the -i command line option.

//...cmp command used with -i option...//

**$cmp -i 10 file1.txt file2.txt**

**$\_**

/\*indicating that both files are identical

after 10 bytes skipped from both the files\*/

Note that in cases like these (where you use -i to skip bytes), the byte at which the comparison begins is treated as byte number zero. **3. -i [bytes to be skipped from first file] : [bytes to be skipped from second file] :**This option is very much similar to the above -i [bytes to be skipped] option but with the difference that now it **allows us to input the number of bytes we want to skip** from both the files separately.

//...cmp command used with -i option...//

**$cmp -i 10:12 file1.txt file2.txt**

**$\_**

/\*indicating that both files are identical

after 10 bytes skipped from first file and

12 bytes skipped from second file\*/

**4. -l option :** This option makes the cmp command print byte position and byte value for all differing bytes.

//...cmp command used with -l option...//

**$cmp -l file1.txt file2.txt**

**20 12 56**

**21 124 12**

**22 150 124**

**23 151 150**

**24 163 151**

**25 40 163**

**26 146 40**

**27 150 151**

**28 12 24**

**29 124 145**

**30 157 163**

/\*indicating that files are different

displaying the position of differing

bytes along with the differing bytes

in both file\*/

The first column in the output represents the position (byte number) of differing bytes. The second column represents the byte value of the differing byte in the first file, while the third column represents the byte value of the differing byte in the second file. **5. -s option :** This allows you to suppress the output normally produced by cmp command *i.e* it compares two files without writing any messages. This gives an exit value of 0 if the files are identical, a value of 1 if different, or a value of 2 if an error message occurs.

//...cmp command used with -s option...//

**$cmp -s file1.txt file.txt**

**1**

/\*indicating files are different without

displaying the differing byte and line\*/

**6. -n [number of bytes to be compared] option :**This option allows you to limit the number of bytes you want to compare ,like if there is only need to compare at most 25 or 50 bytes.

//...cmp command used with -n option...//

**$cmp -n 50 file1.txt file2.txt**

**$\_**

/\*indicating files are identical for starting

50 bytes\*/

**8. – -v option :** This gives the output information and exits. **9. – -help option :** This displays a help message and exits.