SYSTEMS PROGRAMMING

Notes on Bash Commands

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1)
NAME :

   ls

DESCRIPTION :

   List information about the files in the current directory.

OPTIONS :

   -a, --all

      Do not ignore entries starting with .

   -l

      Use a long listing format

   -Q

      All entries are enclosed in "Double Quote"

   -R

      List subdirectories recursively

   -S

      Sort by file size, largest first

   --version

Output version information and exit

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls
linux_commands.pdf  num.py  num1.txt  test.txt  test1.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls -a
.  ..  linux_commands.pdf  num.py  num1.txt  test.txt  test1.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls -l
total 64
-rwxrwxrwx 1 rajat rajat 62837 Aug  7 21:15 linux_commands.pdf
-rwxrwxrwx 1 rajat rajat    35 Aug 12 18:48 num.py
-rwxrwxrwx 1 rajat rajat    20 Aug 12 18:51 num1.txt
-rwxrwxrwx 1 rajat rajat   682 Aug 12 14:20 test.txt
-rwxrwxrwx 1 rajat rajat   682 Aug 12 20:34 test1.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls -Q
"linux_commands.pdf"  "num.py"  "num1.txt"  "test.txt"  "test1.txt"
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls -R
.:
linux_commands.pdf  num.py  num1.txt  test.txt  test1.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls -S
linux_commands.pdf  test.txt  test1.txt  num.py  num1.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls --version
ls (GNU coreutils) 8.32
Copyright (C) 2020 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Written by Richard M. Stallman and David MacKenzie.
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$
```

2)
NAME :

    cp
DESCRIPTION :

    Copy SOURCE to DEST, or multiple SOURCE(s) to
    DIRECTORIES
OPTIONS :

    -i, --interactive
        Prompt before overwrite(overrides a previous -n
option)
    -l
        Hard link files instead of copying

    -n

do not overwrite an existing file (overrides a
previous -i option)

　　　-R
　　　　copy directories recursively

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls
linux_commands.pdf  num.py  num1.txt  test.txt  test1.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cp -i test.txt test1.txt
cp: overwrite 'test1.txt'? y
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cp -l test.txt test2.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cp -n test.txt test1.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls
linux_commands.pdf  num.py  num1.txt  test.txt  test1.txt  test2.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cat test.txt
The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obvious the
 flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had failed
to notice.

It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or prioritiz
e another project. As she woke, she realized she was once again at a crossroads. Would it be another excuse or would she finally find the courage to pursue
her dream? Dana rose and took her first step.
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cat test1.txt
The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obvious the
 flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had failed
to notice.

It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or prioritiz
e another project. As she woke, she realized she was once again at a crossroads. Would it be another excuse or would she finally find the courage to pursue
her dream? Dana rose and took her first step.
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cat test2.txt
The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obvious the
 flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had failed
to notice.

It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or prioritiz
e another project. As she woke, she realized she was once again at a crossroads. Would it be another excuse or would she finally find the courage to pursue
her dream? Dana rose and took her first step.
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ |
```

3)
NAME :
　　　mkdir
DESCRIPTION :
　　　Create the DIRECTORY(ies), if they do not already
　　　Exist
OPTIONS :
　　　-m, --mode
　　　　set file mode (as in chmod), not a=rwx - umask

　　　-p , --parents
　　　　no error if existing, make parent directories as

Needed

    -v, --verbose
        print a message for each created directory

    -Z
        set SELinux security context of each created
        directory to the default type

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls
linux_commands.pdf  num.py  num1.txt  test.txt  test1.txt  test2.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ mkdir dir1
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls
dir1  linux_commands.pdf  num.py  num1.txt  test.txt  test1.txt  test2.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ mkdir -p dir1
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ mkdir -v dir2
mkdir: created directory 'dir2'
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls
dir1  linux_commands.pdf  num1.txt  test1.txt
dir2  num.py             test.txt  test2.txt
```

4)
NAME :
    cat
DESCRIPTION :
    concatenate files and print on the standard output
OPTIONS :
    -b, --number-nonblank
        number non empty output lines, overrides -n

    -E, --show-ends
        display $ at end of each line

    -n, --number
        number all output lines

    -s, --squeeze-blank
        suppress repeated empty output lines

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cat test.txt
The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obvious the
 flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had failed
to notice.

It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or prioritiz
e another project. As she woke, she realized she was once again at a crossroads. Would it be another excuse or would she finally find the courage to pursue
her dream? Dana rose and took her first step.
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cat -b test.txt
     1  The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obv
ious the flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had
 failed to notice.

     2  It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or p
rioritize another project. As she woke, she realized she was once again at a crossroads. Would it be another excuse or would she finally find the courage to
 pursue her dream? Dana rose and took her first step.
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cat -E test.txt
The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obvious the
 flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had failed
to notice.$
$
It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or prioritiz
e another project. As she woke, she realized she was once again at a crossroads. Would it be another excuse or would she finally find the courage to pursue
her dream? Dana rose and took her first step.$
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cat -n test.txt
     1  The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obv
ious the flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had
 failed to notice.
     2
     3  It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or p
rioritize another project. As she woke, she realized she was once again at a crossroads. Would it be another excuse or would she finally find the courage to
 pursue her dream? Dana rose and took her first step.
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cat -s
test.txt
The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obvious the
 flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had failed
to notice.

It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or prioritiz
```

5)
NAME :

grep

DESCRIPTION :

It searches for PATTERNS in each FILE. If no FILE
is given, recursive searches examine the current
working directory, and non recursive searches read
standard input.

OPTIONS :

-i, --ignore-case
Ignore case distinctions in patterns and input
data, so that characters that differ only in
case match each other.

-v, --invert-match
Invert the sense of matching, to select
non-matching lines.

-c, --count

    Suppress   normal   output;   instead print a
    count of matching lines for each input file.
    With   the   -v,   --invert-match option, count
    non-matching lines.

-o, --only-matching

    Print only the matched (non-empty) parts of
    a matching line, with each such part on a
    separate output line.

-n, --line-number

    Prefix each line of output with the 1-based
    line number within its input file.

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ grep -i The test.txt
The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obvious the
 flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had failed
to notice.
It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or prioritiz
e another project. As she woke, she realized she was once again at a crossroads. Would it be another excuse or would she finally find the courage to pursue
her dream? Dana rose and took her first step.
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ grep -c the test.txt
2
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ grep -o the test.txt
the
the
the
the
the
the
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ grep -n the test.txt
1:The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obvious t
he flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had faile
d to notice.
3:It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or priorit
ize another project. As she woke, she realized she was once again at a crossroads. Would it be another excuse or would she finally find the courage to pursu
e her dream? Dana rose and took her first step.
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$
```

6)
NAME :

    sort

DESCRIPTION :

    Write sorted concatenation of all FILE(s) to
    standard output.

OPTIONS :

    -b, --ignore-leading-blanks
        ignore leading blanks

```
-d, --dictionary-order
    consider only blanks and alphanumeric characters

-f, --ignore-case
    fold lower case to upper case characters

-g, --general-numeric-sort
    compare according to general numerical value

-i, --ignore-nonprinting
    consider only printable characters
```

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cat file.txt
wejfvw
fwjfkjw
dbg
rfenf
2213
6774
8585
fajbf
vnvkd
GRur
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ sort -g file.txt
GRur
dbg
fajbf
fwjfkjw
rfenf
vnvkd
wejfvw
2213
6774
8585
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ sort -b file.txt
2213
6774
8585
GRur
dbg
fajbf
fwjfkjw
rfenf
vnvkd
wejfvw
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$
```

7)

NAME :

     wc

DESCRIPTION :

     Print newline, word, and byte counts for each
     FILE, and a total line if more than one FILE
     is specified.A word is a non-zero-length sequence
     of characters delimited by white space.

OPTIONS :

     -c, --bytes
       print the byte counts

     -m, --chars
       print the character counts

     -l, --lines
       print the newline counts

     -w, --words
       print the word counts

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ cat file.txt
wejfvw
fwjfkjw
dbg
rfenf
2213
6774
8585
fajbf
vnvkd
GRur
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ wc -c file.txt
57 file.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ wc -m file.txt
57 file.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ wc -l file.txt
10 file.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ wc -w file.txt
10 file.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ |
```

8)
NAME :

      touch

DESCRIPTION :

      Update the access and modification times of each
      FILE to the current time.A FILE argument that does
      not exist is created empty, unless -c or -h is
      supplied.A FILE argument string of - is handled
      specially and causes touch to change the times of
      the file associated with standard output.

OPTIONS :

      -a
        change only the access time

      -c, --no-create
        do not create any files

      -m
        change only the modification time

      -r, --reference=FILE
        use this file's times instead of current time

      -t STAMP
        use [[CC]YY]MMDDhhmm[.ss] instead of current
        time

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls -l
total 68
drwxrwxrwx 1 rajat rajat  4096 Aug 12 21:06 dir1
-rwxrwxrwx 1 rajat rajat    56 Aug 12 21:40 file.txt
-rwxrwxrwx 1 rajat rajat 62837 Aug  7 21:15 linux_commands.pdf
-rwxrwxrwx 1 rajat rajat    35 Aug 12 18:48 num.py
-rwxrwxrwx 1 rajat rajat    20 Aug 12 18:51 num1.txt
-rwxrwxrwx 1 rajat rajat   682 Aug 12 14:20 test.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ touch -a file.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls -l
total 68
drwxrwxrwx 1 rajat rajat  4096 Aug 12 21:06 dir1
-rwxrwxrwx 1 rajat rajat    56 Aug 12 21:40 file.txt
-rwxrwxrwx 1 rajat rajat 62837 Aug  7 21:15 linux_commands.pdf
-rwxrwxrwx 1 rajat rajat    35 Aug 12 18:48 num.py
-rwxrwxrwx 1 rajat rajat    20 Aug 12 18:51 num1.txt
-rwxrwxrwx 1 rajat rajat   682 Aug 12 14:20 test.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ touch -c file2.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls
dir1   file.txt   linux_commands.pdf   num.py   num1.txt   test.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ touch -m test.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls -l
total 68
drwxrwxrwx 1 rajat rajat  4096 Aug 12 21:06 dir1
-rwxrwxrwx 1 rajat rajat    56 Aug 12 21:40 file.txt
-rwxrwxrwx 1 rajat rajat 62837 Aug  7 21:15 linux_commands.pdf
-rwxrwxrwx 1 rajat rajat    35 Aug 12 18:48 num.py
-rwxrwxrwx 1 rajat rajat    20 Aug 12 18:51 num1.txt
-rwxrwxrwx 1 rajat rajat   682 Aug 12 22:04 test.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ |
```

9)
NAME :

chown

DESCRIPTION :

chown changes the user and/or group ownership of
each given file.

OPTIONS :

-v, --verbose
output a diagnostic for every file processed

--dereference
affect the referent of each symbolic link
f(this is the de - fault), rather than the
symbolic
link itself

```
-h, --no-dereference
    affect symbolic links instead of any referenced
    file (useful only on systems that can change the
    ownership of a symlink)

-L
    traverse every symbolic link to a directory
    encountered

-P
    do not traverse any symbolic links (default)
```

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ chown -v RAJAT file.txt
chown: invalid user: 'RAJAT'
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ chown -v rajat file.txt
ownership of 'file.txt' retained as rajat
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ chown -L rajat file.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ chown -P rajat file.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ |
```

10)
NAME :

echo

DESCRIPTION :

display a line of text

OPTIONS :

-n
    do not output the trailing newline

-e
    enable interpretation of backslash escapes

-E
    disable interpretation of backslash escapes

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ echo Hello guys
Hello guys
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ echo -n Hello guysclear
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ echo -e fsf\efs
fsfefs
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ echo -Efad\df
-Efaddf
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ |
```

11)
NAME :

    rm

DESCRIPTION :

    remove files or directories

OPTIONS :

    -f, --force

        ignore nonexistent files and arguments, never
        prompt

    -i

        prompt before every removal

    -I

        prompt once before removing more than three
        files, or when removing recursively; less
        intrusive than -i, while still giving
        protection against most mistakes

    -r, -R, --recursive

        remove directories and their contents
        recursively

    -d, --dir

        remove empty directories

```
        -v, --verbos
            explain what is being done
```

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls
dir1   file.txt         num.py     test.txt
dir2   linux_commands.pdf  num1.txt  test1.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ rm test3.txt
rm: cannot remove 'test3.txt': No such file or directory
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ rm -f test3.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ rm -i test.txt
rm: remove regular file 'test.txt'? n
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ rm -d dir2
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ rm -v test1.txt
removed 'test1.txt'
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ ls
dir1   file.txt  linux_commands.pdf  num.py  num1.txt  test.txt
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ |
```

12)
NAME :

diff

DESCRIPTION :
        compare files line by line
OPTIONS :
        -q, --brief
            report only when files differ

        -s, --report-identical-files
            report when two files are the same

        -e, --ed
            output an ed script

        -n, --rcs
            output an RCS format diff

        -y, --side-by-side
            output in two columns

```
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ diff -q test.txt file.txt
Files test.txt and file.txt differ
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ diff -s test.txt test1.txt
Files test.txt and test1.txt are identical
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ diff -nrajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ diff -e fil
e.txt test.txt
1,10c
The blinking light caught her attention. She thought about it a bit and couldn't remember ever noticing it before. That was strange since it was obvious the
 flashing light had been there for years. Now she wondered how she missed it for that amount of time and what other things in her small town she had failed
to notice.

It had been her dream for years but Dana had failed to take any action toward making it come true. There had always been a good excuse to delay or prioritiz
e another project. As she woke, she realized she was once again at a crossroads. Would it be another excuse or would she finally find the courage to pursue
her dream? Dana rose and took her first step.
.
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$ diff -y file.txt test.txt
wejfvw                                                              | The blinking light caught her attention. She thought about it
fwjfkjw                                                             |
dbg                                                                 | It had been her dream for years but Dana had failed to take a
rfenf                                                               <
2213                                                                <
6774                                                                <
8585                                                                <
fajbf                                                               <
vnvkd                                                               <
GRr                                                                 <
rajat@LAPTOP-ADQR56A7:/mnt/c/Users/RAJAT/Desktop/System_programming$
```