

LINUX:DAY1

whoami

my login

hostname

name of the computer

echo "hello world"

#print characters in the screen

echo \$home

#print environment variable

echo my login is \$(whoami)

#replace \$(xx) with program o/p

date

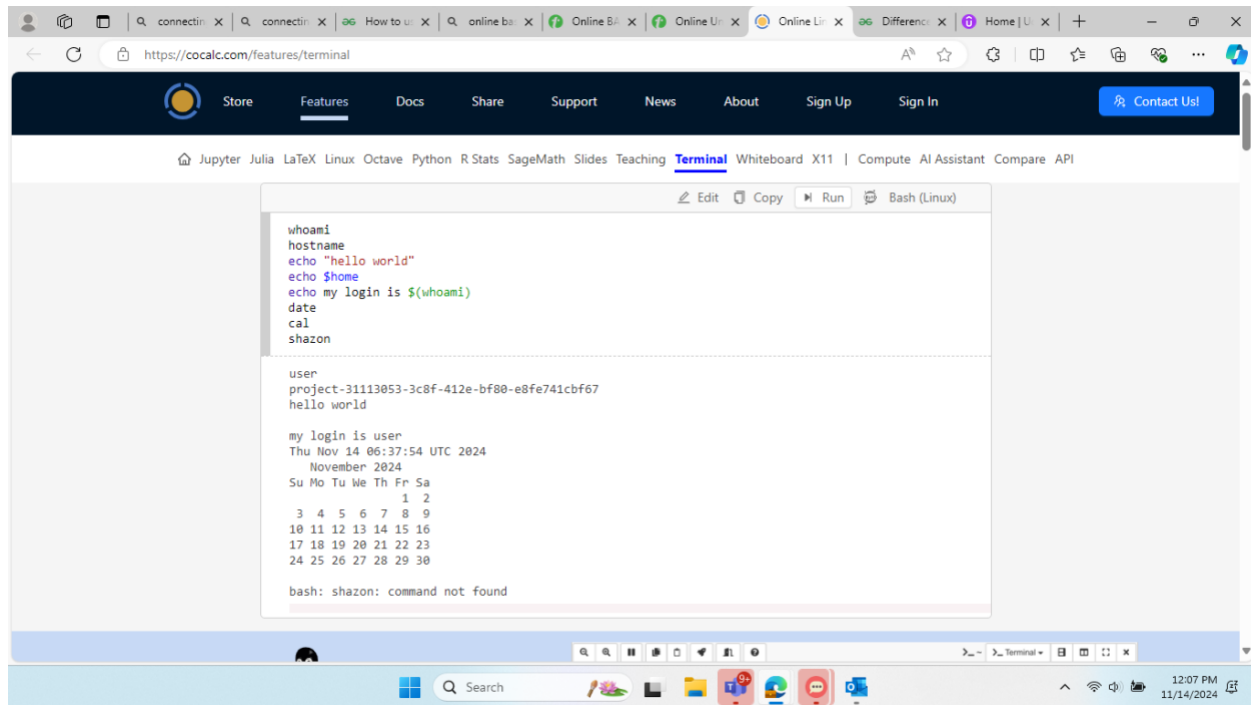
#current date and time

cal

#month of a calender

shazone

bad command



The screenshot shows a web browser window with the URL <https://cocalc.com/features/terminal>. The browser has several tabs open, including 'connectin', 'How to u', 'online ba', 'Online B', 'Online U', 'Online Lin', 'Differen', and 'Home | U'. The page has a dark blue header with navigation links: Store, Features, Docs, Share, Support, News, About, Sign Up, Sign In, and a Contact Us button. Below the header, there's a navigation bar with links to various tools: Jupyter, Julia, LaTeX, Linux, Octave, Python, R Stats, SageMath, Slides, Teaching, Terminal (highlighted), Whiteboard, X11, Compute, AI Assistant, Compare, and API. The main content area is a terminal window titled 'Terminal' with a 'Bash (Linux)' prompt. The terminal shows the following commands and their output:

```
whoami
hostname
echo "hello world"
echo $home
echo my login is $(whoami)
date
cal
shazon

user
project-31113053-3c8f-412e-bf00-e8fe741cbf67
hello world

my login is user
Thu Nov 14 06:37:54 UTC 2024
November 2024
Su Mo Tu We Th Fr Sa
                1  2
 3  4  5  6  7  8  9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30

bash: shazon: command not found
```

Commands: Selected text processing utilities-

- **awk – (Aho, Weinberger, and Kernighan)**

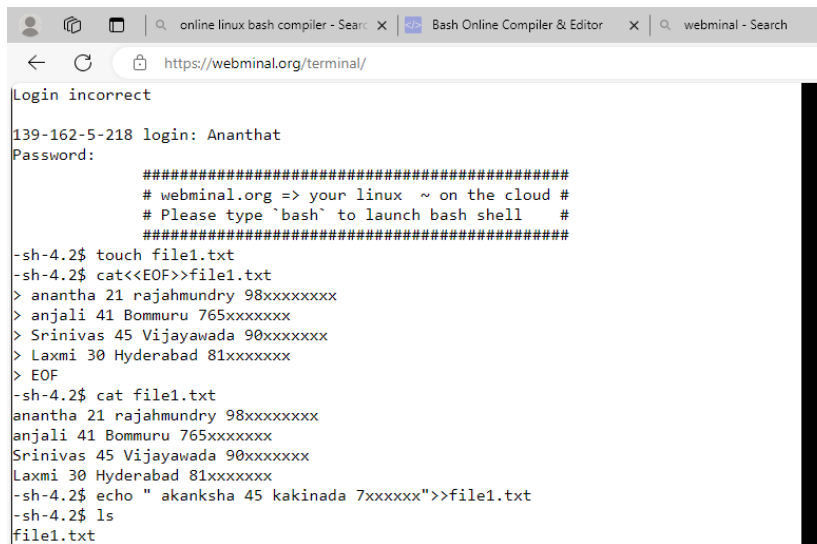
It is a versatile text processing tool for extracting and manipulating data. It processes text files line by line, allowing you to perform calculations, format output, and generate reports.

Syntax : awk options 'selection_criteria {action }' input-file > output-file

```
-sh-4.2$ cat file1.txt
anantha 21 rajahmundry 98xxxxxxxx
anjali 41 Bommuru 765xxxxxxxx
Srinivas 45 Vijayawada 90xxxxxxxx
Laxmi 30 Hyderabad 81xxxxxxxx
-sh-4.2$ echo " akanksha 45 kakinada 7xxxxxx">>file1.txt
-sh-4.2$ ls
file1.txt
-sh-4.2$ cat file1.txt
anantha 21 rajahmundry 98xxxxxxxx
anjali 41 Bommuru 765xxxxxxxx
Srinivas 45 Vijayawada 90xxxxxxxx
Laxmi 30 Hyderabad 81xxxxxxxx
akanksha 45 kakinada 7xxxxxx
-sh-4.2$ awk '/ 45 / {print} ' file1.txt
Srinivas 45 Vijayawada 90xxxxxxxx
akanksha 45 kakinada 7xxxxxx
-sh-4.2$
```

- **cat-("concatenate")**

cat (short for "concatenate") is a simple but powerful command in Linux that is primarily used to display the content of text files in the terminal. It's often used for quick inspection of file contents.



The screenshot shows a web browser window with the address bar displaying 'https://webminal.org/terminal/'. The terminal window shows a login attempt that fails, followed by a prompt to type 'bash' to launch a shell. After typing 'bash', the user is at a shell prompt. They create a file 'file1.txt' using 'touch', then use 'cat <<EOF>>' to append content to it. The content added is: 'anantha 21 rajahmundry 98xxxxxxxx', 'anjali 41 Bommuru 765xxxxxxxx', 'Srinivas 45 Vijayawada 90xxxxxxxx', 'Laxmi 30 Hyderabad 81xxxxxxxx', and 'EOF'. They then use 'cat file1.txt' to display the file's contents, which are shown line by line. Finally, they use 'echo " akanksha 45 kakinada 7xxxxxx">>file1.txt' to append more content and 'ls' to list the files, showing 'file1.txt'.

- **cut -**

cut is used for extracting sections from each line of files. The cut command in linux is a command for cutting out the sections from each line of files and writing the result to standard output. It can be used to cut parts of a line by byte position, character, and field.

Syntax: cut OPTION... [FILE]...

```
HelloWorld.sh
1 echo "Hello, World!" | cut -c 1-5

Output:
Hello
```

- **diff-**

diff stands for **difference**. The diff command is a versatile utility that is pre-installed on most Linux distributions. Its primary purpose is to compare the contents of two files and display the differences between them.

Basic syntax of the diff command is as follows:

diff [OPTION]... FILE1 FILE2

```
> EOF
-sh-4.2$ cat file1.txt
anantha 21 rajahmundry 98xxxxxxxx
anjali 41 Bommuru 765xxxxxxxx
Srinivas 45 Vijayawada 90xxxxxxxx
Laxmi 30 Hyderabad 81xxxxxxxx
akanksha 45 kakinada 7xxxxxx
Kavya 34 yeleswaram 7777xxxxx
Swathi 48 tuni 5667xxxx
Amwia 100 happyplace xxxxxxxx
-sh-4.2$ cat dupfile.txt
anantha 21 rajahmundry 98xxxxxxxx
anjali 41 Bommuru 765xxxxxxxx
Srinivas 45 Vijayawada 90xxxxxxxx
Laxmi 30 Hyderabad 81xxxxxxxx
akanksha 45 kakinada 7xxxxxx
Kavya 34 yeleswaram 7777xxxxx
Swathi 48 tuni 5667xxxx
Amwia 100 happyplace xxxxxxxx
-sh-4.2$ diff file1.txt dupfile.txt
6,8d5
< Kavya 34 yeleswaram 7777xxxxx
< Swathi 48 tuni 5667xxxx
< Amwia 100 happyplace xxxxxxxx
-sh-4.2$
```

- **grep -(Global Regular Expression Print)**

grep is used for searching text using patterns. Regular expressions provide a powerful way to specify complex search patterns, including character sequences, wildcards, and repetition rules

Syntax: grep [options] pattern [files]

```
1 touch geekfile.txt
2 cat<<EOF>> geekfile.txt
3 unix is great os. unix was developed in Bell labs.
4 Unix linux which one you choose.
5 uNix is easy to learn.unix is a multiuser os.Learn
6 LINUX unix is a powerful.
7 EOF
8 grep -i "LINUX" geekfile.txt

Program input

Output

Unix linux which one you choose.
LINUX unix is a powerful.

[Execution complete with exit code 0]
```

- **head-**

The head command displays the first n lines of a text file. The default number of lines is 10 if n is not specified.

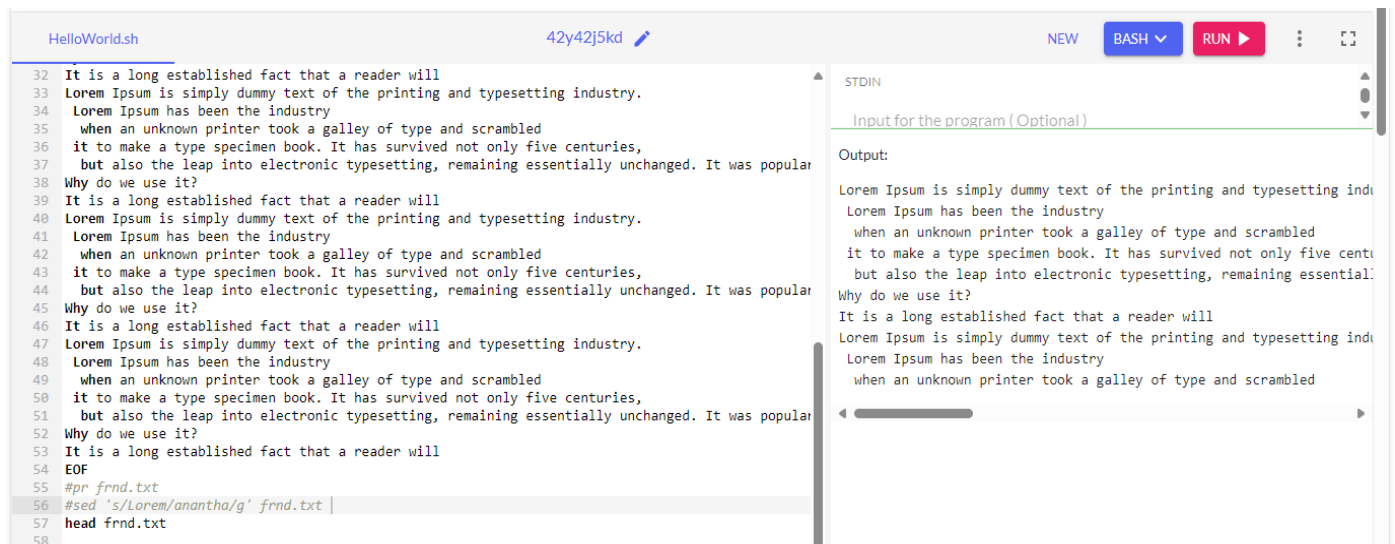
Syntax:

To display the first 10 lines we write

`head filename.txt`

To display the first n lines we write,

`head -n filename.txt`



The screenshot shows a code editor with a file named 'HelloWorld.sh'. The script contains the following code:

```
32 It is a long established fact that a reader will
33 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
34 Lorem Ipsum has been the industry
35 when an unknown printer took a galley of type and scrambled
36 it to make a type specimen book. It has survived not only five centuries,
37 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
38 Why do we use it?
39 It is a long established fact that a reader will
40 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
41 Lorem Ipsum has been the industry
42 when an unknown printer took a galley of type and scrambled
43 it to make a type specimen book. It has survived not only five centuries,
44 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
45 Why do we use it?
46 It is a long established fact that a reader will
47 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
48 Lorem Ipsum has been the industry
49 when an unknown printer took a galley of type and scrambled
50 it to make a type specimen book. It has survived not only five centuries,
51 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
52 Why do we use it?
53 It is a long established fact that a reader will
54 EOF
55 #pr frnd.txt
56 #sed 's/Lorem/anantha/g' frnd.txt |
57 head frnd.txt
58
```

The output of the script is displayed on the right side of the editor:

```
Output:
Lorem Ipsum is simply dummy text of the printing and typesetting ind
Lorem Ipsum has been the industry
when an unknown printer took a galley of type and scrambled
it to make a type specimen book. It has survived not only five cent
but also the leap into electronic typesetting, remaining essential
Why do we use it?
It is a long established fact that a reader will
Lorem Ipsum is simply dummy text of the printing and typesetting ind
Lorem Ipsum has been the industry
when an unknown printer took a galley of type and scrambled
```

- **less-**

The 'less' command in Linux is an indispensable utility for browsing the contents of text files interactively. Unlike traditional text editors, 'less' allows you to view text files page by page without loading the entire file into memory.

Syntax :`less [options] filename`

- **od-**

od stands for octal dump, this command is used to display contents of a file in different formats such as *octal*, *hexadecimal*, *ASCII* characters, *decimals*.

To display a file in *octal* format we write,

Syntax :`od -b test.txt`



The screenshot shows a code editor with a file named 'HelloWorld.sh'. The script contains the following code:

```
1 touch frnd.txt
2 cat <<EOF>>frnd.txt
3 101
4 102
5 103
6 104
7 105
8 EOF
9 #pr frnd.txt
10 #sed 's/Lorem/anantha/g' frnd.txt
11 #head frnd.txt
12 #tail -n 3 frnd.txt
13 cat frnd.txt
14 od -b frnd.txt
15
16 #csplit frnd.txt 10
17
18
```

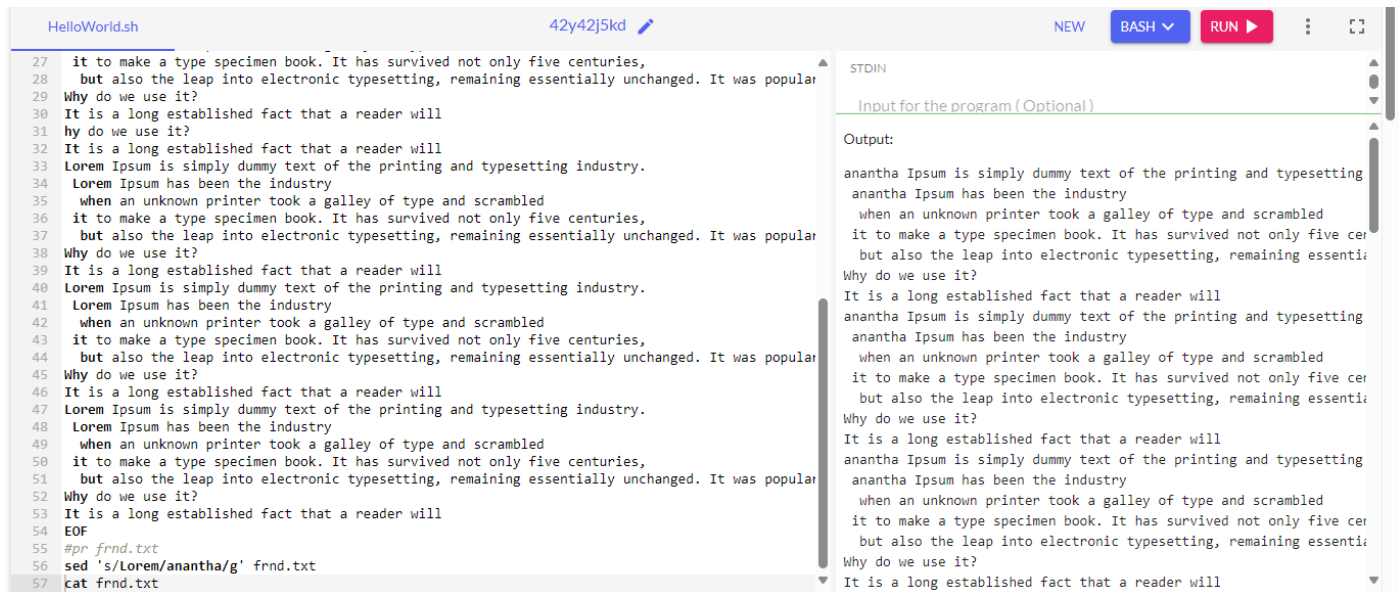
The output of the script is displayed on the right side of the editor:

```
Output:
101
102
103
104
105
0000000 061 060 061 012 061 060 062 012 061 060 063 012 061 060 064 012
0000020 061 060 065 012
0000024
```

- **sed – (Stream Editor)**

sed is a stream editor that enables non-interactive text manipulation. It allows you to modify, replace, or delete text patterns in files. It works by processing text line by line, applying a set of editing commands specified in a script or directly on the command line.

Syntax: sed [OPTIONS] 'SCRIPT' [INPUTFILE...]



The screenshot shows the OneCompiler web IDE. The editor has a file named 'HelloWorld.sh' with 57 lines of code. The code uses sed to replace 'Lorem Ipsum' with 'anantha Ipsum' in a file named 'frnd.txt'. The output pane on the right shows the result of running the script, displaying the modified text from 'frnd.txt'.

```
27 it to make a type specimen book. It has survived not only five centuries,  
28 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular  
29 why do we use it?  
30 It is a long established fact that a reader will  
31 hy do we use it?  
32 It is a long established fact that a reader will  
33 Lorem Ipsum is simply dummy text of the printing and typesetting industry.  
34 Lorem Ipsum has been the industry  
35 when an unknown printer took a galley of type and scrambled  
36 it to make a type specimen book. It has survived not only five centuries,  
37 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular  
38 why do we use it?  
39 It is a long established fact that a reader will  
40 Lorem Ipsum is simply dummy text of the printing and typesetting industry.  
41 Lorem Ipsum has been the industry  
42 when an unknown printer took a galley of type and scrambled  
43 it to make a type specimen book. It has survived not only five centuries,  
44 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular  
45 why do we use it?  
46 It is a long established fact that a reader will  
47 Lorem Ipsum is simply dummy text of the printing and typesetting industry.  
48 Lorem Ipsum has been the industry  
49 when an unknown printer took a galley of type and scrambled  
50 it to make a type specimen book. It has survived not only five centuries,  
51 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular  
52 why do we use it?  
53 It is a long established fact that a reader will  
54 EOF  
55 #pr frnd.txt  
56 sed 's/Lorem/anantha/g' frnd.txt  
57 cat frnd.txt
```

Output:

```
anantha Ipsum is simply dummy text of the printing and typesetting  
anantha Ipsum has been the industry  
when an unknown printer took a galley of type and scrambled  
it to make a type specimen book. It has survived not only five cer  
but also the leap into electronic typesetting, remaining essenti  
Why do we use it?  
It is a long established fact that a reader will  
anantha Ipsum is simply dummy text of the printing and typesetting  
anantha Ipsum has been the industry  
when an unknown printer took a galley of type and scrambled  
it to make a type specimen book. It has survived not only five cer  
but also the leap into electronic typesetting, remaining essenti  
Why do we use it?  
It is a long established fact that a reader will  
anantha Ipsum is simply dummy text of the printing and typesetting  
anantha Ipsum has been the industry  
when an unknown printer took a galley of type and scrambled  
it to make a type specimen book. It has survived not only five cer  
but also the leap into electronic typesetting, remaining essenti  
Why do we use it?  
It is a long established fact that a reader will
```

- **Sort-**

We can also sort output alphabetically using the sort command.

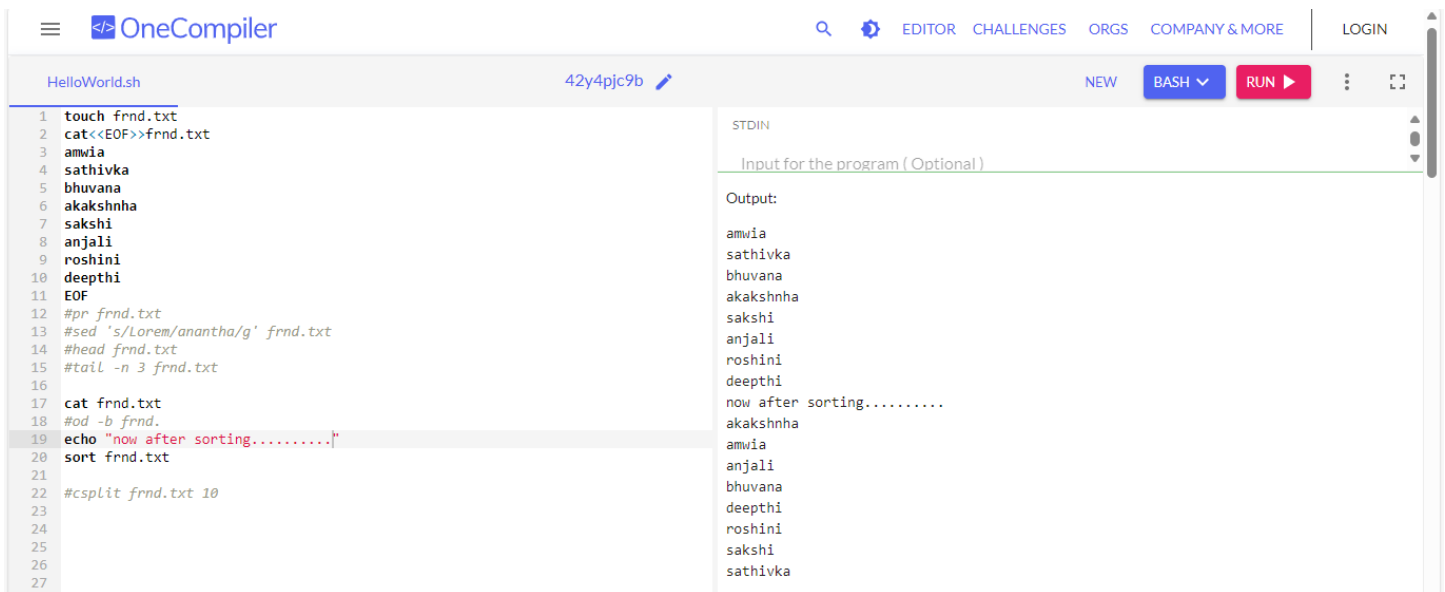
Syntax:

To sort the file test.txt we write,

sort test.txt

Given a file of numbers we can sort it numerically using the -n option,

sort -n numericalFile.txt



The screenshot shows the OneCompiler web IDE with a file named 'HelloWorld.sh'. The script creates a file 'frnd.txt' with a list of names, sorts it alphabetically using the 'sort' command, and prints the sorted output. The output pane shows the sorted list of names.

```
1 touch frnd.txt  
2 cat<<EOF>>frnd.txt  
3 amwia  
4 sathivka  
5 bhuvana  
6 akakshnha  
7 sakshi  
8 anjali  
9 roshini  
10 deepthi  
11 EOF  
12 #pr frnd.txt  
13 #sed 's/Lorem/anantha/g' frnd.txt  
14 #head frnd.txt  
15 #tail -n 3 frnd.txt  
16  
17 cat frnd.txt  
18 #od -b frnd.  
19 echo "now after sorting....."  
20 sort frnd.txt  
21  
22 #csplit frnd.txt 10  
23  
24  
25  
26  
27
```

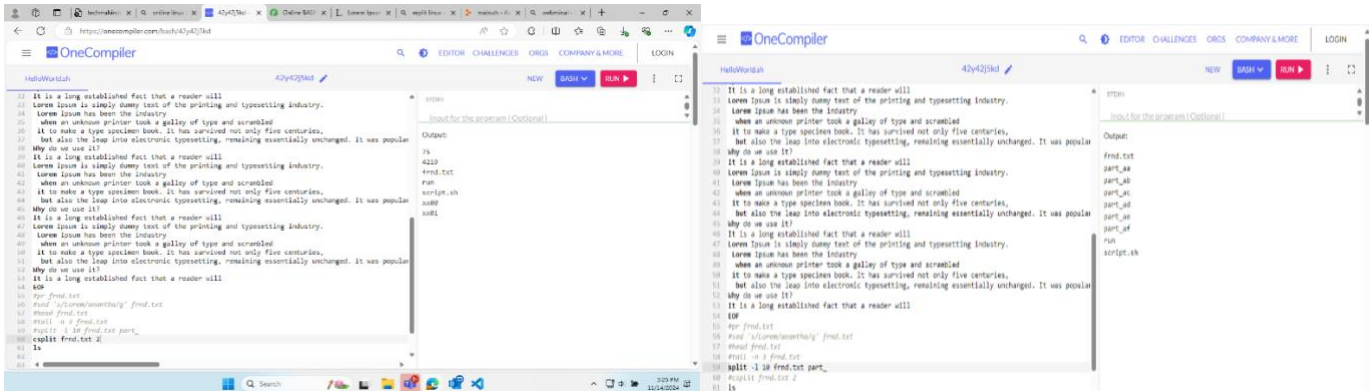
Output:

```
amwia  
sathivka  
bhuvana  
akakshnha  
sakshi  
anjali  
roshini  
deepthi  
now after sorting.....  
akakshnha  
amwia  
anjali  
bhuvana  
deepthi  
roshini  
sakshi  
sathivka
```

- **Split-**

to split a text file based on a regular expression with the help of a few popular text-processing utilities in Linux. The standard use case for *csplit* utility is for text files containing headers or titles and using them as a delimiter. Let's split our input file using the regex for the header

Syntax: `$ csplit tables.txt`

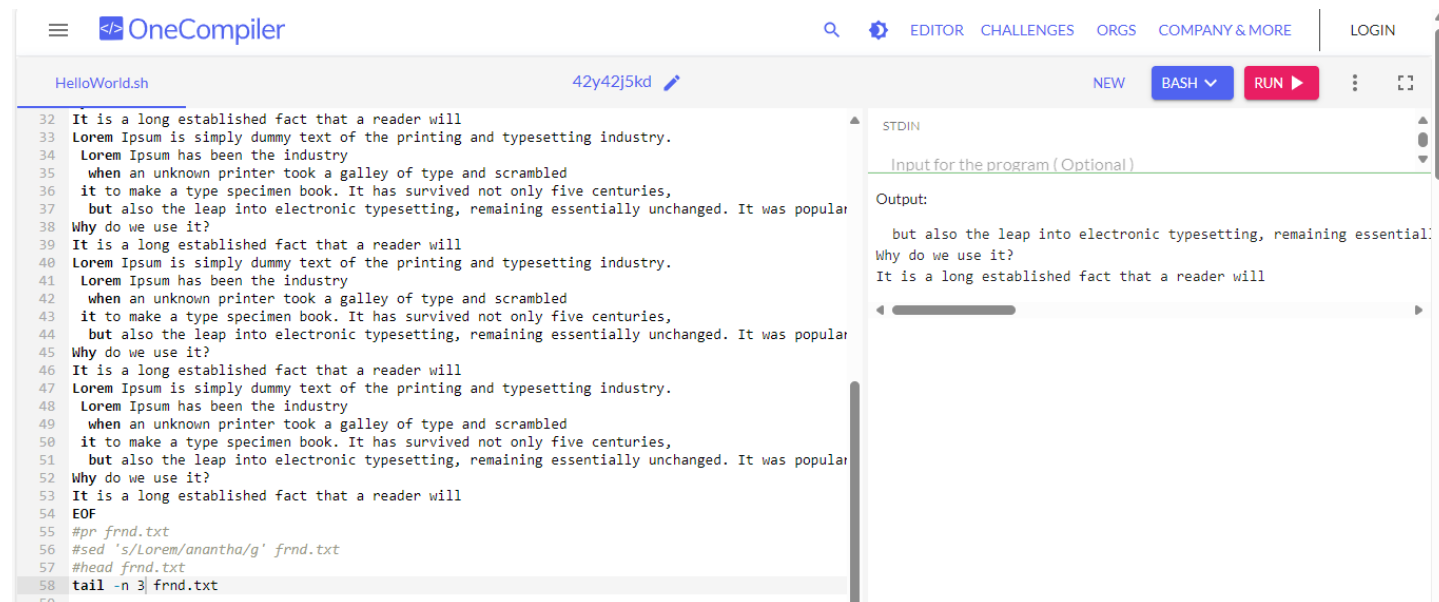


- **Tail-**

The *tail* command works the same as the head command but in reverse, that is it displays lines from the bottom of a text file.

To display the last 10 lines(default), we write,

Syntax: `tail test.txt`



- **Tr-**

It supports a range of transformations including uppercase to lowercase, squeezing repeating characters, deleting specific characters, and basic find and replace. It can be used with UNIX pipes to support more complex translation. **tr stands for translate.**

Syntax: `$ tr [OPTION] SET1 [SET2]`



The screenshot shows the OneCompiler IDE interface. On the left, a shell script named 'HelloWorld.sh' is displayed with the following code:

```
1 touch frnd.txt
2 cat<<EOF>>frnd.txt
3 amwia is a good girl and she always be strong.
4 EOF
5 #pr frnd.txt
6 #sed 's/Lorem/anantha/g' frnd.txt
7 #head frnd.txt
8 #tail -n 3 frnd.txt
9 cat frnd.txt
10 #od -b frnd.
11 echo "now after transform....."
12 #sort frnd.txt
13 cat frnd.txt | tr [a-z] [A-Z]
14
15 #csplit frnd.txt 10
16
```

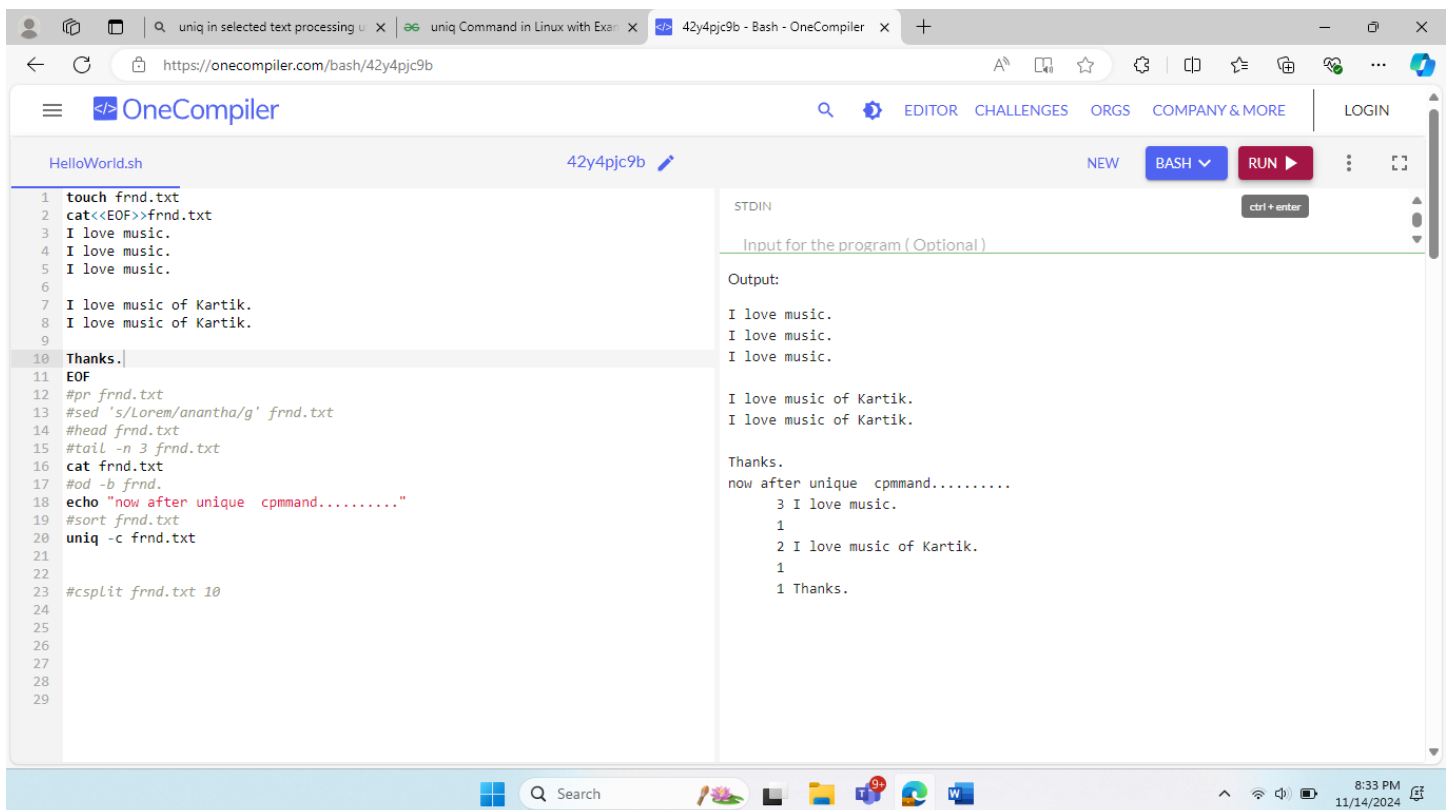
On the right, the 'Output' section shows the result of running the script:

```
amwia is a good girl and she always be strong.
now after transform.....
AMWIA IS A GOOD GIRL AND SHE ALWAYS BE STRONG.
```

- **Uniq-**

The **uniq** command in Linux is a command-line utility that reports or filters out the repeated lines in a file. In simple words, **uniq** is the tool that helps to detect the adjacent duplicate lines and also deletes the duplicate lines.

Syntax: `uniq [OPTIONS] [INPUT_FILE [OUTPUT_FILE]]`



The screenshot shows the OneCompiler IDE interface. On the left, a shell script named 'HelloWorld.sh' is displayed with the following code:

```
1 touch frnd.txt
2 cat<<EOF>>frnd.txt
3 I love music.
4 I love music.
5 I love music.
6
7 I love music of Kartik.
8 I love music of Kartik.
9
10 Thanks.
11 EOF
12 #pr frnd.txt
13 #sed 's/Lorem/anantha/g' frnd.txt
14 #head frnd.txt
15 #tail -n 3 frnd.txt
16 cat frnd.txt
17 #od -b frnd.
18 echo "now after unique cpmmand....."
19 #sort frnd.txt
20 uniq -c frnd.txt
21
22
23 #csplit frnd.txt 10
24
25
26
27
28
29
```

On the right, the 'Output' section shows the result of running the script:

```
I love music.
I love music.
I love music.

I love music of Kartik.
I love music of Kartik.

Thanks.
now after unique cpmmand.....
 3 I love music.
 1
 2 I love music of Kartik.
 1
 1 Thanks.
```

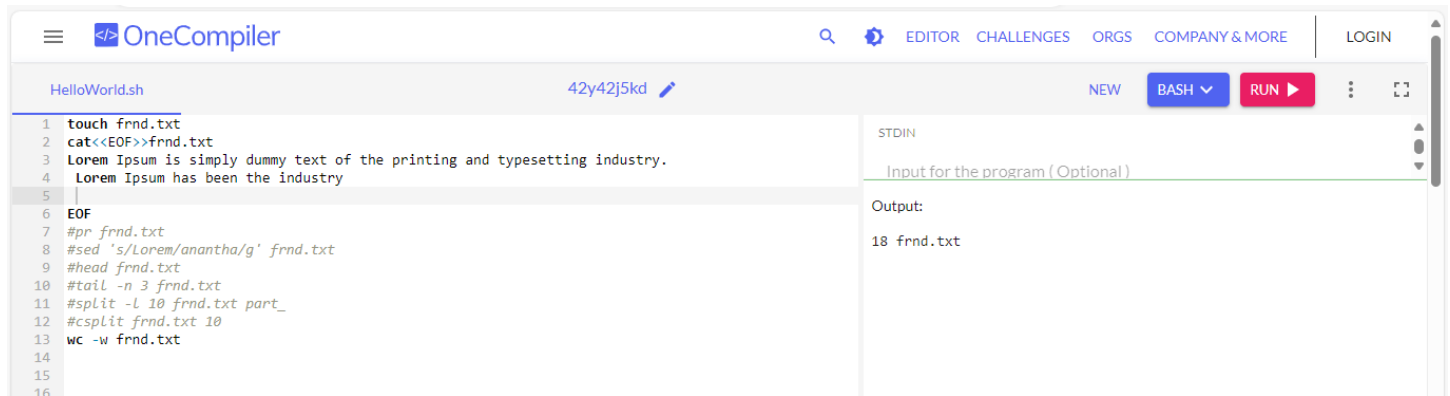
- **Wc-**

wc stands for word count, this command counts the words, characters and lines in a file.

Syntax : wc test.txt

By default this command will give all three counts, that is words, characters and lines however we can use options to control this.

Syntax: wc -l test.txt



The screenshot shows the OneCompiler IDE interface. The editor on the left contains a shell script named 'HelloWorld.sh' with the following content:

```
1 touch frnd.txt
2 cat<<EOF>>frnd.txt
3 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
4 Lorem Ipsum has been the industry
5
6 EOF
7 #pr frnd.txt
8 #sed 's/Lorem/anantha/g' frnd.txt
9 #head frnd.txt
10 #tail -n 3 frnd.txt
11 #split -l 10 frnd.txt part_
12 #csplit frnd.txt 10
13 wc -w frnd.txt
14
15
16
```

The right panel shows the output of the script, which is '18 frnd.txt'.

Practice Sessions:

1.Create a file and enter the data in it



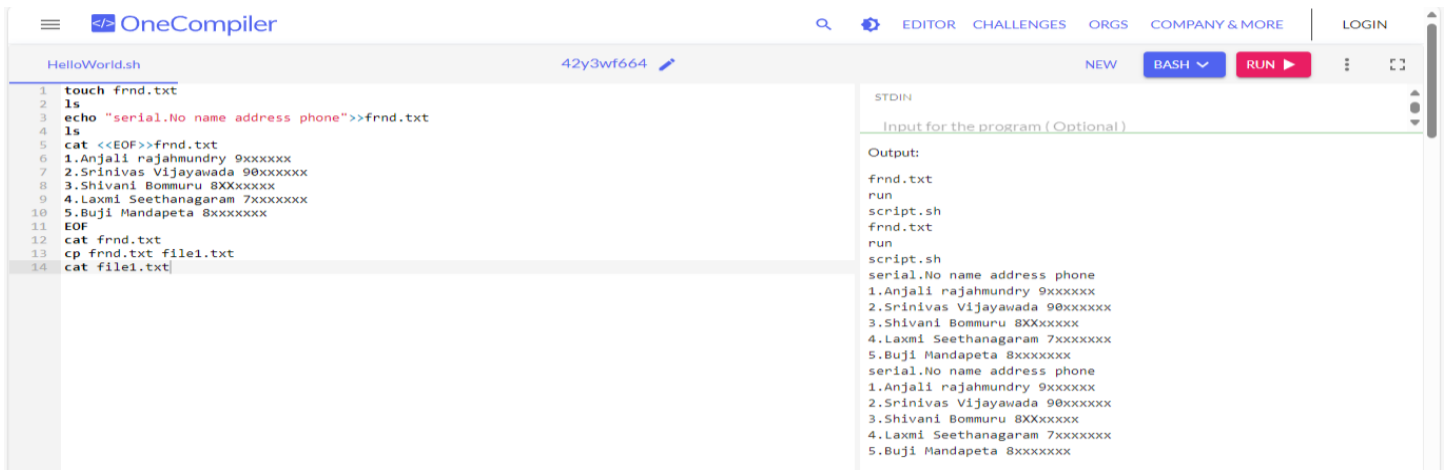
The screenshot shows the OneCompiler IDE interface. The editor on the left contains a shell script named 'HelloWorld.sh' with the following content:

```
1 touch frnd.txt
2 ls
3 echo "serial.No name address phone">>frnd.txt
4 ls
5 cat <<EOF>>frnd.txt
6 1.Anjali rajahmundry 9xxxxxx
7 2.Srinivas Vijayawada 90xxxxxx
8 3.Shivani Bommuru 8XXxxxxxx
9 EOF
10 cat frnd.txt
```

The right panel shows the output of the script, which is:

```
frnd.txt
run
script.sh
frnd.txt
run
script.sh
serial.No name address phone
1.Anjali rajahmundry 9xxxxxx
2.Srinivas Vijayawada 90xxxxxx
3.Shivani Bommuru 8XXxxxxxx
```

2. Copy the created file to the new file



```
1 touch frnd.txt
2 ls
3 echo "serial.No name address phone">>frnd.txt
4 ls
5 cat <<EOF>>frnd.txt
6 1.Anjali rajahmundry 9xxxxxx
7 2.Srinivas Vijayawada 90xxxxxx
8 3.Shivani Bommuru 8XXxxxxx
9 4.Laxmi Seethanagaram 7xxxxxxx
10 5.Buji Mandapeta 8xxxxxxx
11 EOF
12 cat frnd.txt
13 cp frnd.txt file1.txt
14 cat file1.txt
```

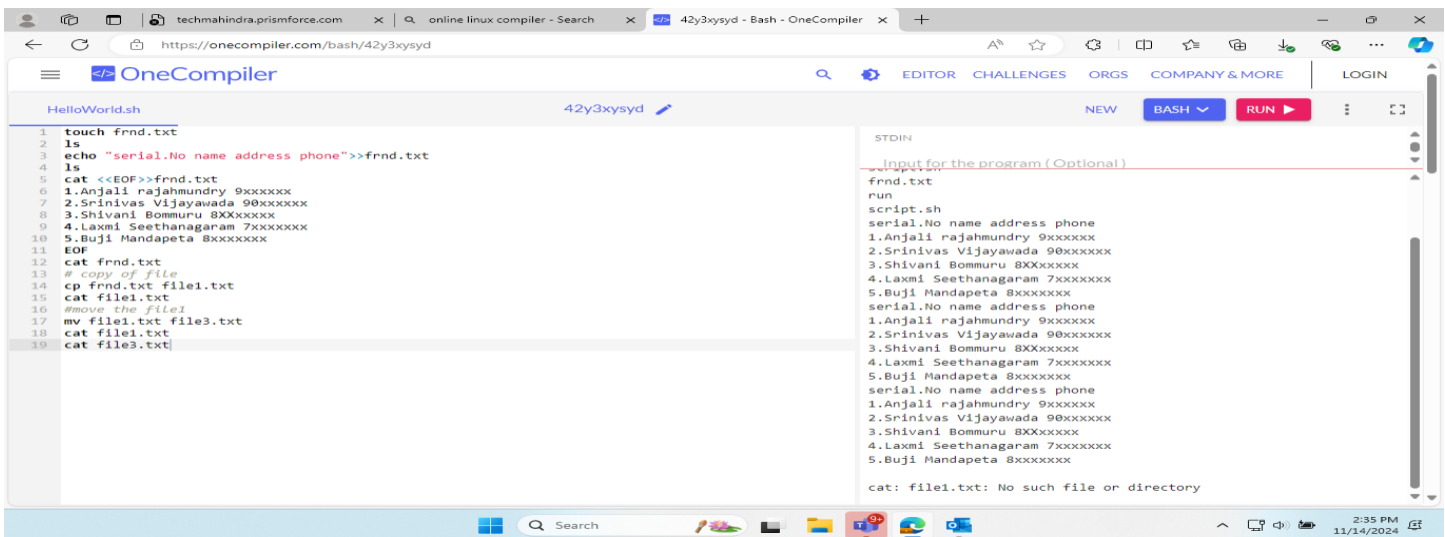
STDIN

Input for the program (Optional)

Output:

```
frnd.txt
run
script.sh
frnd.txt
run
script.sh
serial.No name address phone
1.Anjali rajahmundry 9xxxxxx
2.Srinivas Vijayawada 90xxxxxx
3.Shivani Bommuru 8XXxxxxx
4.Laxmi Seethanagaram 7xxxxxxx
5.Buji Mandapeta 8xxxxxxx
serial.No name address phone
1.Anjali rajahmundry 9xxxxxx
2.Srinivas Vijayawada 90xxxxxx
3.Shivani Bommuru 8XXxxxxx
4.Laxmi Seethanagaram 7xxxxxxx
5.Buji Mandapeta 8xxxxxxx
```

3.Move the file to new file



```
1 touch frnd.txt
2 ls
3 echo "serial.No name address phone">>frnd.txt
4 ls
5 cat <<EOF>>frnd.txt
6 1.Anjali rajahmundry 9xxxxxx
7 2.Srinivas Vijayawada 90xxxxxx
8 3.Shivani Bommuru 8XXxxxxx
9 4.Laxmi Seethanagaram 7xxxxxxx
10 5.Buji Mandapeta 8xxxxxxx
11 EOF
12 cat frnd.txt
13 # copy of file
14 cp frnd.txt file1.txt
15 cat file1.txt
16 #move the file3
17 mv file1.txt file3.txt
18 cat file1.txt
19 cat file3.txt
```


STDIN

Input for the program (Optional)

Output:

```
frnd.txt
run
script.sh
serial.No name address phone
1.Anjali rajahmundry 9xxxxxx
2.Srinivas Vijayawada 90xxxxxx
3.Shivani Bommuru 8XXxxxxx
4.Laxmi Seethanagaram 7xxxxxxx
5.Buji Mandapeta 8xxxxxxx
serial.No name address phone
1.Anjali rajahmundry 9xxxxxx
2.Srinivas Vijayawada 90xxxxxx
3.Shivani Bommuru 8XXxxxxx
4.Laxmi Seethanagaram 7xxxxxxx
5.Buji Mandapeta 8xxxxxxx
cat: file1.txt: No such file or directory
```

4.remove the file



```
1 touch frnd.txt
2 ls
3 echo "serial.No name address phone">>frnd.txt
4 ls
5 cat <<EOF>>frnd.txt
6 1.Anjali rajahmundry 9xxxxxx
7 2.Srinivas Vijayawada 90xxxxxx
8 3.Shivani Bommuru 8XXxxxxx
9 4.Laxmi Seethanagaram 7xxxxxxx
10 5.Buji Mandapeta 8xxxxxxx
11 EOF
12 cat frnd.txt
13 # copy of file
14 cp frnd.txt file1.txt
15 cat file1.txt
16 #remove the file1
17 mv file1.txt file3.txt
18 cat file1.txt
19 cat file3.txt
20 rm file3.txt
21 cat file3.txt
```

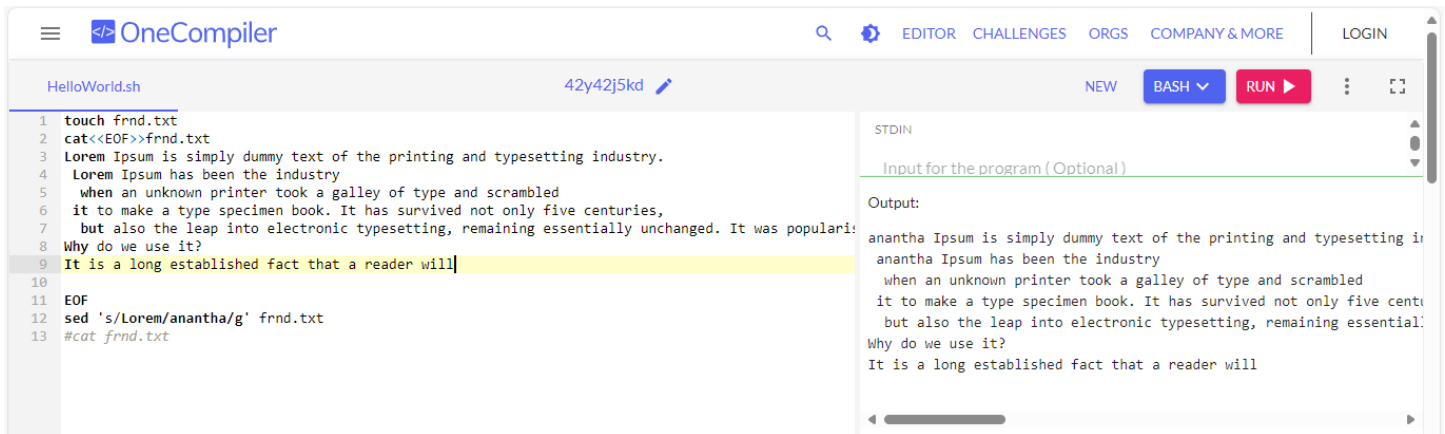
STDIN

Input for the program (Optional)

Output:

```
run
script.sh
serial.No name address phone
1.Anjali rajahmundry 9xxxxxx
2.Srinivas Vijayawada 90xxxxxx
3.Shivani Bommuru 8XXxxxxx
4.Laxmi Seethanagaram 7xxxxxxx
5.Buji Mandapeta 8xxxxxxx
serial.No name address phone
1.Anjali rajahmundry 9xxxxxx
2.Srinivas Vijayawada 90xxxxxx
3.Shivani Bommuru 8XXxxxxx
4.Laxmi Seethanagaram 7xxxxxxx
5.Buji Mandapeta 8xxxxxxx
cat: file1.txt: No such file or directory
cat: file3.txt: No such file or directory
```

5.replace a word with new another word in the file



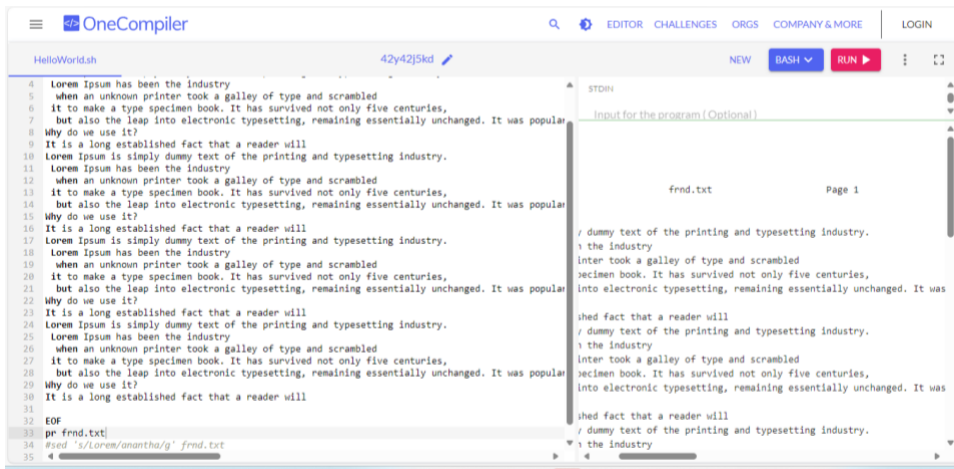
The screenshot shows the OneCompiler web interface. The editor on the left contains a shell script named `HelloWorld.sh` with the following content:

```
1 touch frnd.txt
2 cat<<EOF>>frnd.txt
3 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
4 Lorem Ipsum has been the industry
5 when an unknown printer took a galley of type and scrambled
6 it to make a type specimen book. It has survived not only five centuries,
7 but also the leap into electronic typesetting, remaining essentially unchanged. It was populari
8 why do we use it?
9 It is a long established fact that a reader will
10 EOF
11 sed 's/Lorem/anantha/g' frnd.txt
12 #cat frnd.txt
```

The output on the right, under the heading "Output:", shows the result of running the script:

```
anantha Ipsum is simply dummy text of the printing and typesetting in
anantha Ipsum has been the industry
when an unknown printer took a galley of type and scrambled
it to make a type specimen book. It has survived not only five centi
but also the leap into electronic typesetting, remaining essential
why do we use it?
It is a long established fact that a reader will
```

6.Create pages in the given file

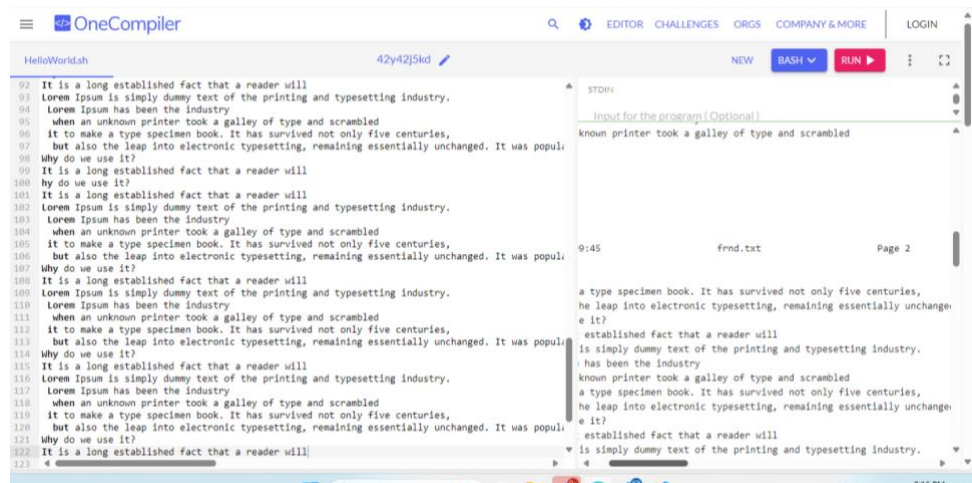


The screenshot shows the OneCompiler web interface. The editor on the left contains a shell script named `HelloWorld.sh` with the following content:

```
4 Lorem Ipsum has been the industry
5 when an unknown printer took a galley of type and scrambled
6 it to make a type specimen book. It has survived not only five centuries,
7 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
8 why do we use it?
9 It is a long established fact that a reader will
10 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
11 Lorem Ipsum has been the industry
12 when an unknown printer took a galley of type and scrambled
13 it to make a type specimen book. It has survived not only five centuries,
14 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
15 why do we use it?
16 It is a long established fact that a reader will
17 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
18 Lorem Ipsum has been the industry
19 when an unknown printer took a galley of type and scrambled
20 it to make a type specimen book. It has survived not only five centuries,
21 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
22 why do we use it?
23 It is a long established fact that a reader will
24 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
25 Lorem Ipsum has been the industry
26 when an unknown printer took a galley of type and scrambled
27 it to make a type specimen book. It has survived not only five centuries,
28 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
29 why do we use it?
30 It is a long established fact that a reader will
31 EOF
32 cp frnd.txt
33 #sed 's/Lorem/anantha/g' frnd.txt
34 #cat frnd.txt
```

The output on the right, under the heading "Output:", shows the result of running the script:

```
frnd.txt Page 1
/ dummy text of the printing and typesetting industry.
/ the industry
/ nter took a galley of type and scrambled
/ specimen book. It has survived not only five centuries,
/ into electronic typesetting, remaining essentially unchanged. It was
shed fact that a reader will
/ dummy text of the printing and typesetting industry.
/ the industry
/ nter took a galley of type and scrambled
/ specimen book. It has survived not only five centuries,
/ into electronic typesetting, remaining essentially unchanged. It was
shed fact that a reader will
/ dummy text of the printing and typesetting industry.
/ the industry
```



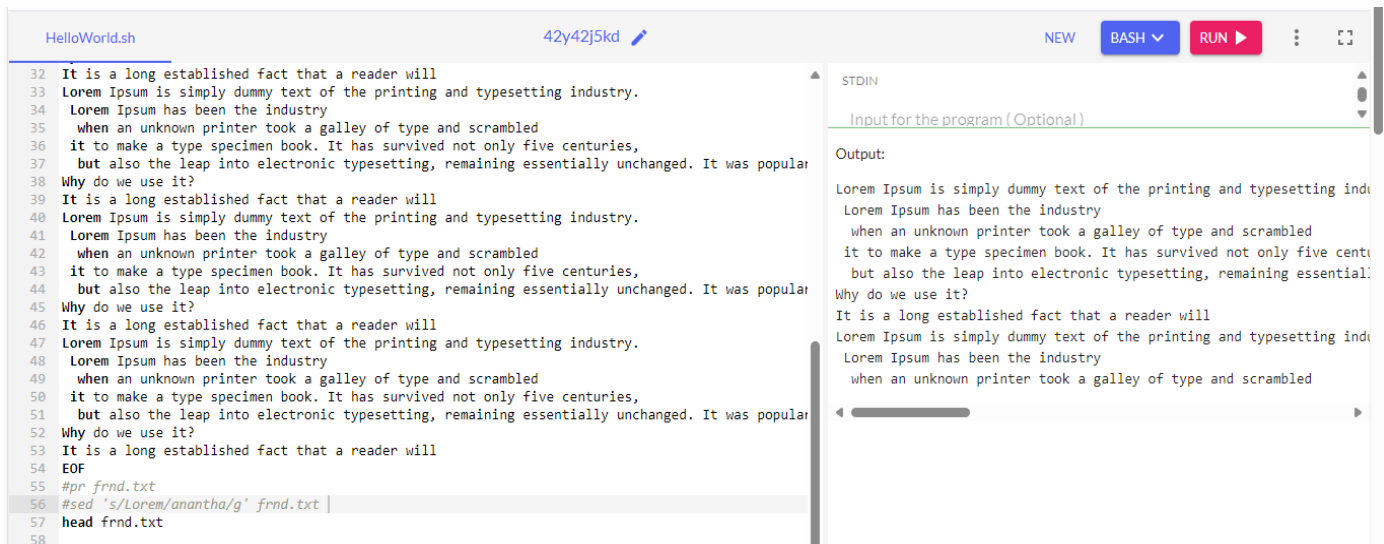
The screenshot shows the OneCompiler web interface. The editor on the left contains a shell script named `HelloWorld.sh` with the following content:

```
92 It is a long established fact that a reader will
93 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
94 Lorem Ipsum has been the industry
95 when an unknown printer took a galley of type and scrambled
96 it to make a type specimen book. It has survived not only five centuries,
97 but also the leap into electronic typesetting, remaining essentially unchanged. It was popul
98 why do we use it?
99 It is a long established fact that a reader will
100 why do we use it?
101 It is a long established fact that a reader will
102 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
103 Lorem Ipsum has been the industry
104 when an unknown printer took a galley of type and scrambled
105 it to make a type specimen book. It has survived not only five centuries,
106 but also the leap into electronic typesetting, remaining essentially unchanged. It was popul
107 why do we use it?
108 It is a long established fact that a reader will
109 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
110 Lorem Ipsum has been the industry
111 when an unknown printer took a galley of type and scrambled
112 it to make a type specimen book. It has survived not only five centuries,
113 but also the leap into electronic typesetting, remaining essentially unchanged. It was popul
114 why do we use it?
115 It is a long established fact that a reader will
116 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
117 Lorem Ipsum has been the industry
118 when an unknown printer took a galley of type and scrambled
119 it to make a type specimen book. It has survived not only five centuries,
120 but also the leap into electronic typesetting, remaining essentially unchanged. It was popul
121 why do we use it?
122 It is a long established fact that a reader will
123
```

The output on the right, under the heading "Output:", shows the result of running the script:

```
frnd.txt Page 2
a type specimen book. It has survived not only five centuries,
he leap into electronic typesetting, remaining essentially unchange
e it?
established fact that a reader will
is simply dummy text of the printing and typesetting industry.
has been the industry
known printer took a galley of type and scrambled
a type specimen book. It has survived not only five centuries,
he leap into electronic typesetting, remaining essentially unchange
e it?
established fact that a reader will
is simply dummy text of the printing and typesetting industry.
```

7. Print starting few lines of content in the file

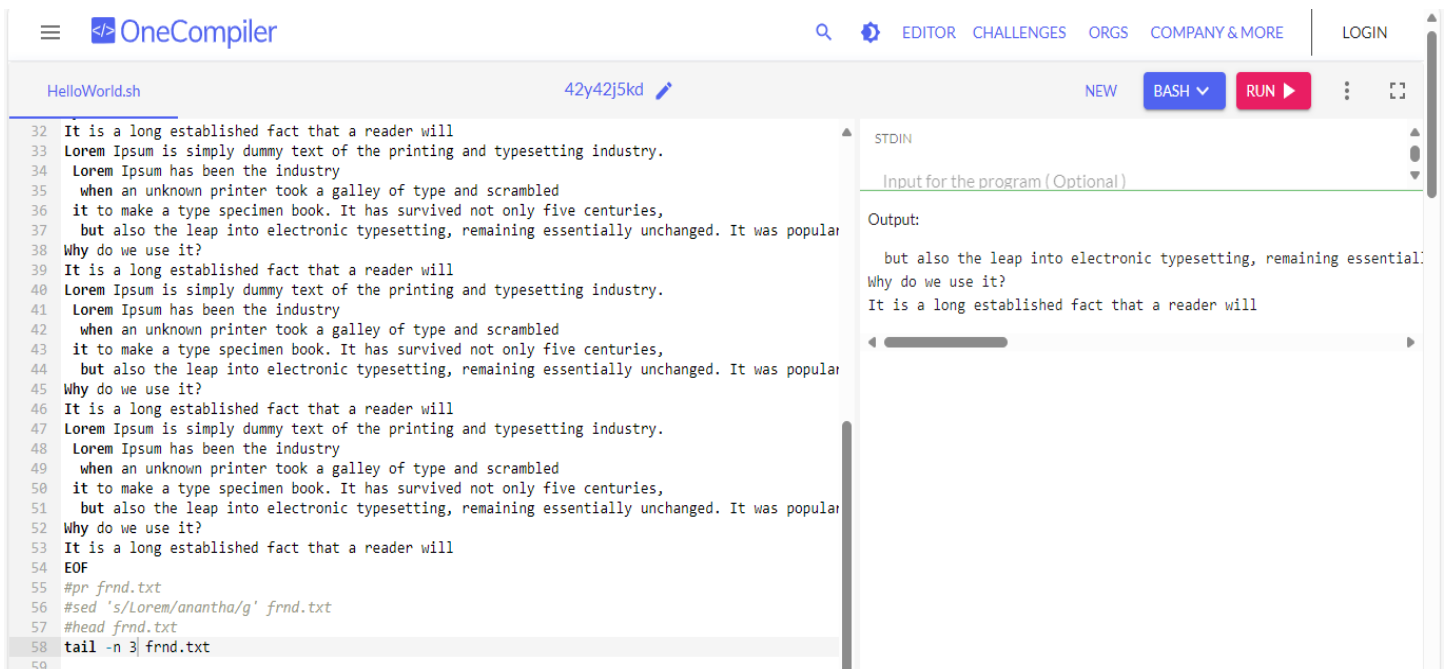


The screenshot shows the OneCompiler IDE interface. The editor on the left contains a shell script named `HelloWorld.sh` with the following content:

```
32 It is a long established fact that a reader will
33 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
34 Lorem Ipsum has been the industry
35 when an unknown printer took a galley of type and scrambled
36 it to make a type specimen book. It has survived not only five centuries,
37 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
38 Why do we use it?
39 It is a long established fact that a reader will
40 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
41 Lorem Ipsum has been the industry
42 when an unknown printer took a galley of type and scrambled
43 it to make a type specimen book. It has survived not only five centuries,
44 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
45 Why do we use it?
46 It is a long established fact that a reader will
47 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
48 Lorem Ipsum has been the industry
49 when an unknown printer took a galley of type and scrambled
50 it to make a type specimen book. It has survived not only five centuries,
51 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
52 Why do we use it?
53 It is a long established fact that a reader will
54 EOF
55 #pr frnd.txt
56 #sed 's/Lorem/anantha/g' frnd.txt |
57 head frnd.txt
58
```

The right-hand pane shows the output of the script, which is the first few lines of the file `frnd.txt` after the substitution of `anantha` for `Lorem`.

8. print last few lines of content in the file



The screenshot shows the OneCompiler IDE interface. The editor on the left contains a shell script named `HelloWorld.sh` with the following content:

```
32 It is a long established fact that a reader will
33 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
34 Lorem Ipsum has been the industry
35 when an unknown printer took a galley of type and scrambled
36 it to make a type specimen book. It has survived not only five centuries,
37 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
38 Why do we use it?
39 It is a long established fact that a reader will
40 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
41 Lorem Ipsum has been the industry
42 when an unknown printer took a galley of type and scrambled
43 it to make a type specimen book. It has survived not only five centuries,
44 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
45 Why do we use it?
46 It is a long established fact that a reader will
47 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
48 Lorem Ipsum has been the industry
49 when an unknown printer took a galley of type and scrambled
50 it to make a type specimen book. It has survived not only five centuries,
51 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
52 Why do we use it?
53 It is a long established fact that a reader will
54 EOF
55 #pr frnd.txt
56 #sed 's/Lorem/anantha/g' frnd.txt
57 #head frnd.txt
58 tail -n 3 frnd.txt
59
```

The right-hand pane shows the output of the script, which is the last three lines of the file `frnd.txt` after the substitution of `anantha` for `Lorem`.

9. Split the file

The screenshot shows the OneCompiler web interface. The editor contains a shell script named `42y42j5kd` with the following content:

```
32 It is a long established fact that a reader will
33 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
34 Lorem Ipsum has been the industry
35 when an unknown printer took a galley of type and scrambled
36 it to make a type specimen book. It has survived not only five centuries,
37 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
38 why do we use it?
39 It is a long established fact that a reader will
40 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
41 Lorem Ipsum has been the industry
42 when an unknown printer took a galley of type and scrambled
43 it to make a type specimen book. It has survived not only five centuries,
44 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
45 why do we use it?
46 It is a long established fact that a reader will
47 Lorem Ipsum is simply dummy text of the printing and typesetting industry.
48 Lorem Ipsum has been the industry
49 when an unknown printer took a galley of type and scrambled
50 it to make a type specimen book. It has survived not only five centuries,
51 but also the leap into electronic typesetting, remaining essentially unchanged. It was popular
52 why do we use it?
53 It is a long established fact that a reader will
54 EOF
55 #pr frnd.txt
56 #sed 's/Lorem/anantha/g' frnd.txt
57 #head frnd.txt
58 #tail -n 3 frnd.txt
59 #split -l 10 frnd.txt part_
60 csplit frnd.txt 2
61 ls
62
63
```

The output pane on the right shows the following results:

```
Output:
75
4219
frnd.txt
run
script.sh
xx00
xx01
```

10. Do the word count of the content in the file

The screenshot shows the OneCompiler web interface with a new script named `42y42j5kd`. The script content is as follows:

```
10 the release of Letraset sheets containing Lorem Ipsum passages, and more recently with
11 desktop publishing software
12 like Aldus PageMaker including versions of Lorem Ipsum.
13 why do we use it?
14 It is a long established fact that a reader will be distracted by the
15 readable content of a page when looking at its layout. The point of using Lorem
16 Ipsum is that it has a more-or-less normal distribution of letters, as opposed to
17 using 'Content here, content here', making it look like readable English. Many desktop
18 publishing packages and web page editors now use Lorem Ipsum as their default model text,
19 and a search for 'lorem ipsum' will uncover many web sites still in their infancy.
20 Various versions have evolved over the years, sometimes by accident, sometimes on purpose
21 (injected humour and the like).
22 Where does it come from?
23 Contrary to popular belief, Lorem Ipsum is not simply random text.
24 It has roots in a piece of classical Latin literature from 45 BC, making it over
25 2000 years old. Richard McClintock, a Latin professor at Hampden-Sydney College in
26 Virginia, looked up one of the more obscure Latin words, consectetur, from a Lorem Ipsum
27 passage, and going through the cites of the word in classical literature, discovered the
28 undoubtable source. Lorem Ipsum comes from sections 1.10.32 and 1.10.33
29 written in 45 BC. This book is a treatise on the theory of ethics, very popular during
30 the Renaissance. The first line of Lorem Ipsum by English versions from
31 the 1914 translation by H. Rackham.
32 EOF
33 #pr frnd.txt
34 #sed 's/Lorem/anantha/g' frnd.txt
35 #head frnd.txt
36 #tail -n 3 frnd.txt
37 split -n 2 frnd.txt
38 ls
39 wc -w xaa
40 wc -w xab
41 wc -w frnd.txt
```

The output pane on the right displays the results of the word count:

```
Output:
frnd.txt
run
script.sh
xaa
xab
169 xaa
168 xab
336 frnd.txt
```