Yandex

Unix Command Line

File content exploration
Part I

How can we explore files?

Files exploration commands

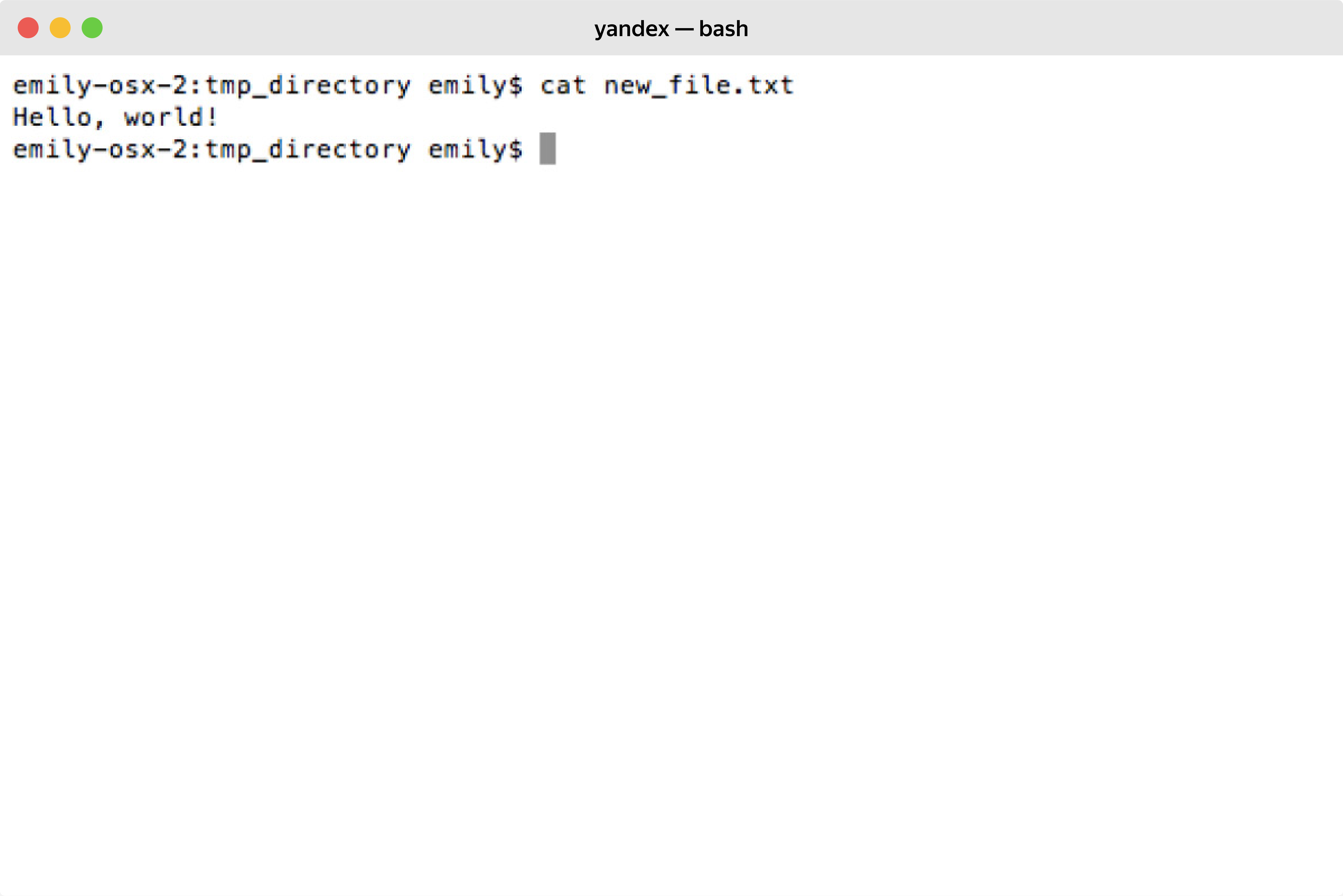
- cat
- head
- tail
- more
- less
- wc
- grep

cat

- displays the contents of a file at the command line
- copies or append text files into a document

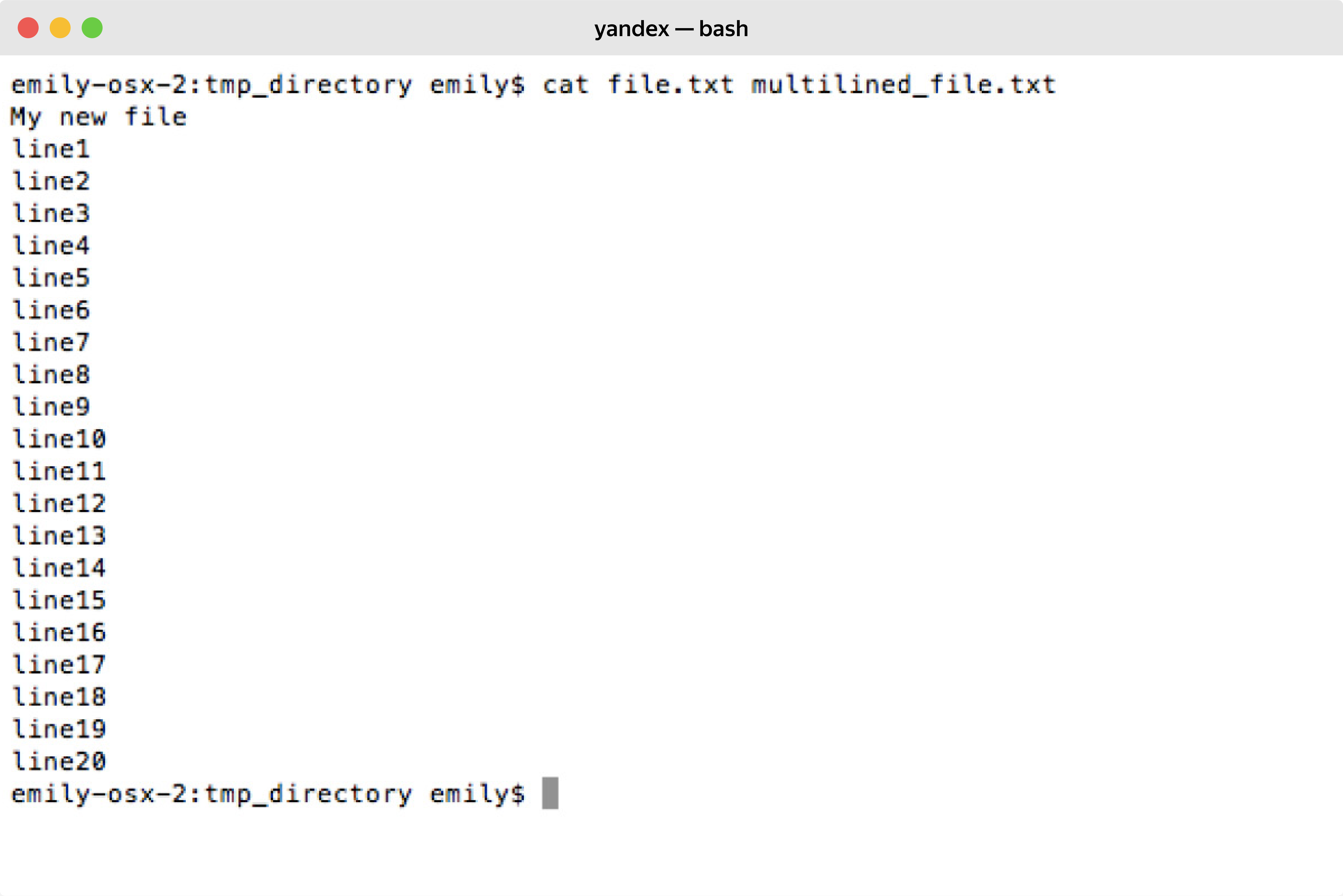
```
cat [OPTION]... [FILE]...
```

cat



```
emily-osx-2:tmp_directory emily$ cat new_file.txt
Hello, world!
emily-osx-2:tmp_directory emily$ 
```

cat



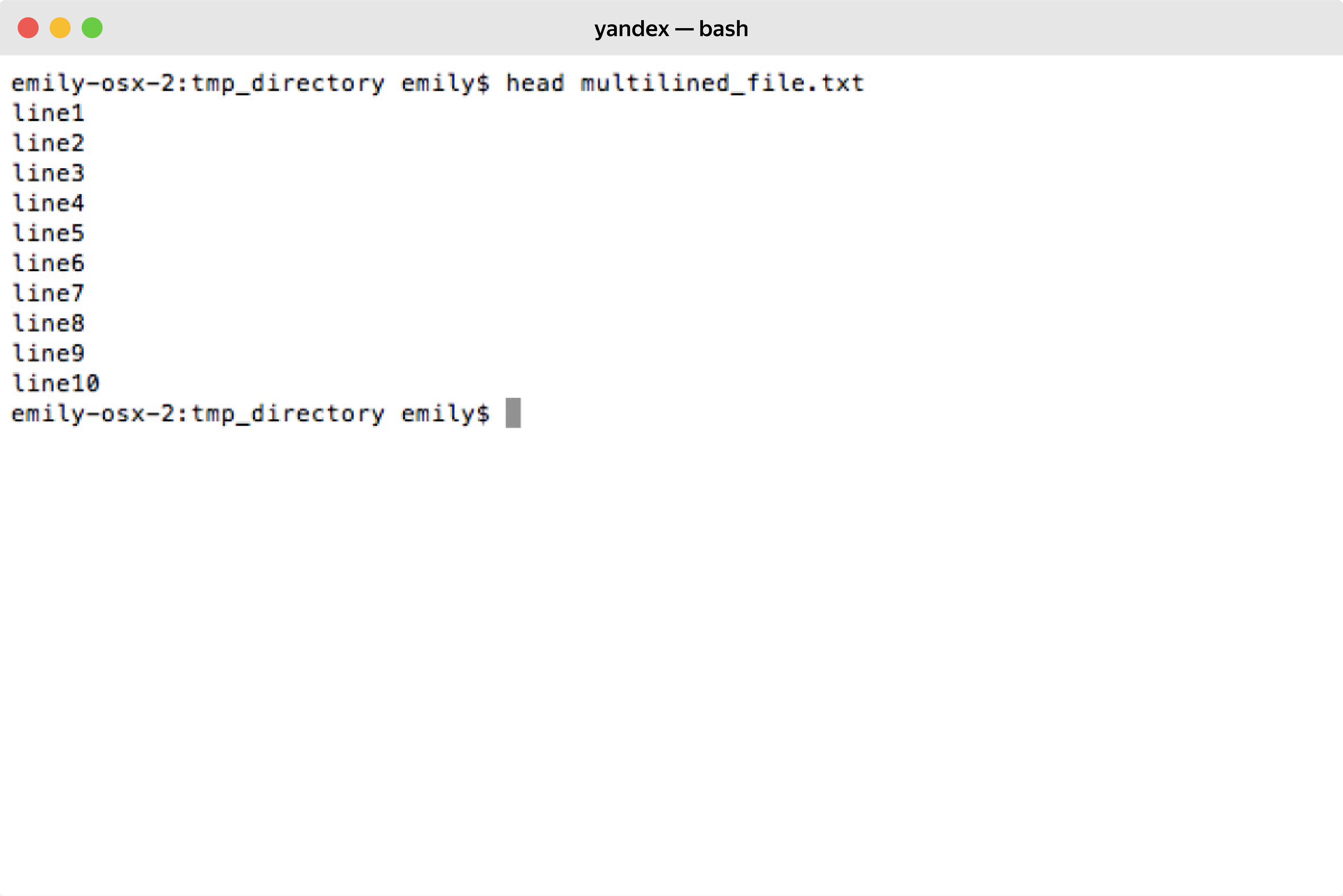
```
emily-osx-2:tmp_directory emily$ cat file.txt multilined_file.txt
My new file
line1
line2
line3
line4
line5
line6
line7
line8
line9
line10
line11
line12
line13
line14
line15
line16
line17
line18
line19
line20
emily-osx-2:tmp_directory emily$ 
```

head

- prints the first part of files

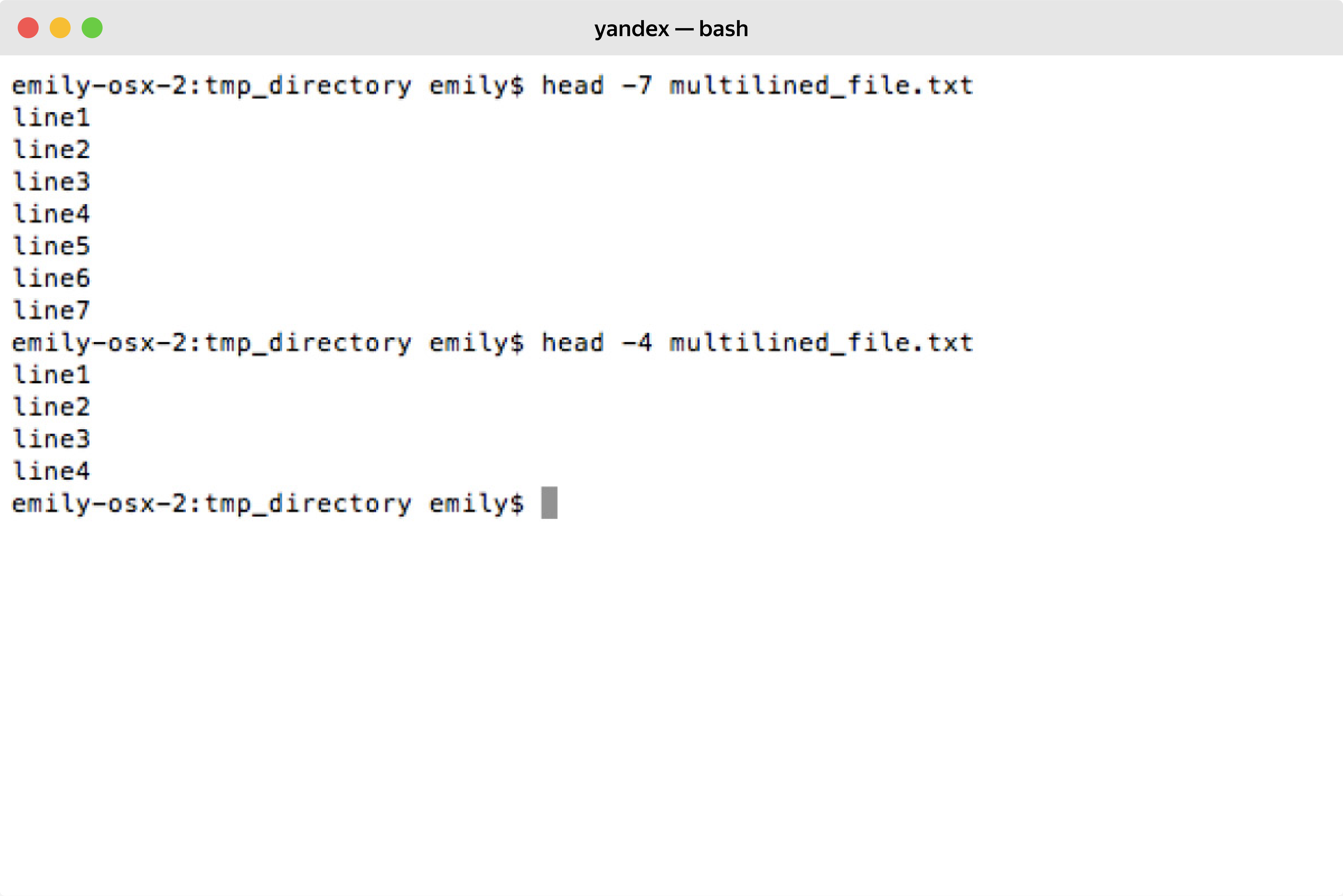
```
head [OPTION]... [FILE]...
```

head



```
emily-osx-2:tmp_directory emily$ head multilined_file.txt
line1
line2
line3
line4
line5
line6
line7
line8
line9
line10
emily-osx-2:tmp_directory emily$ 
```

head -n



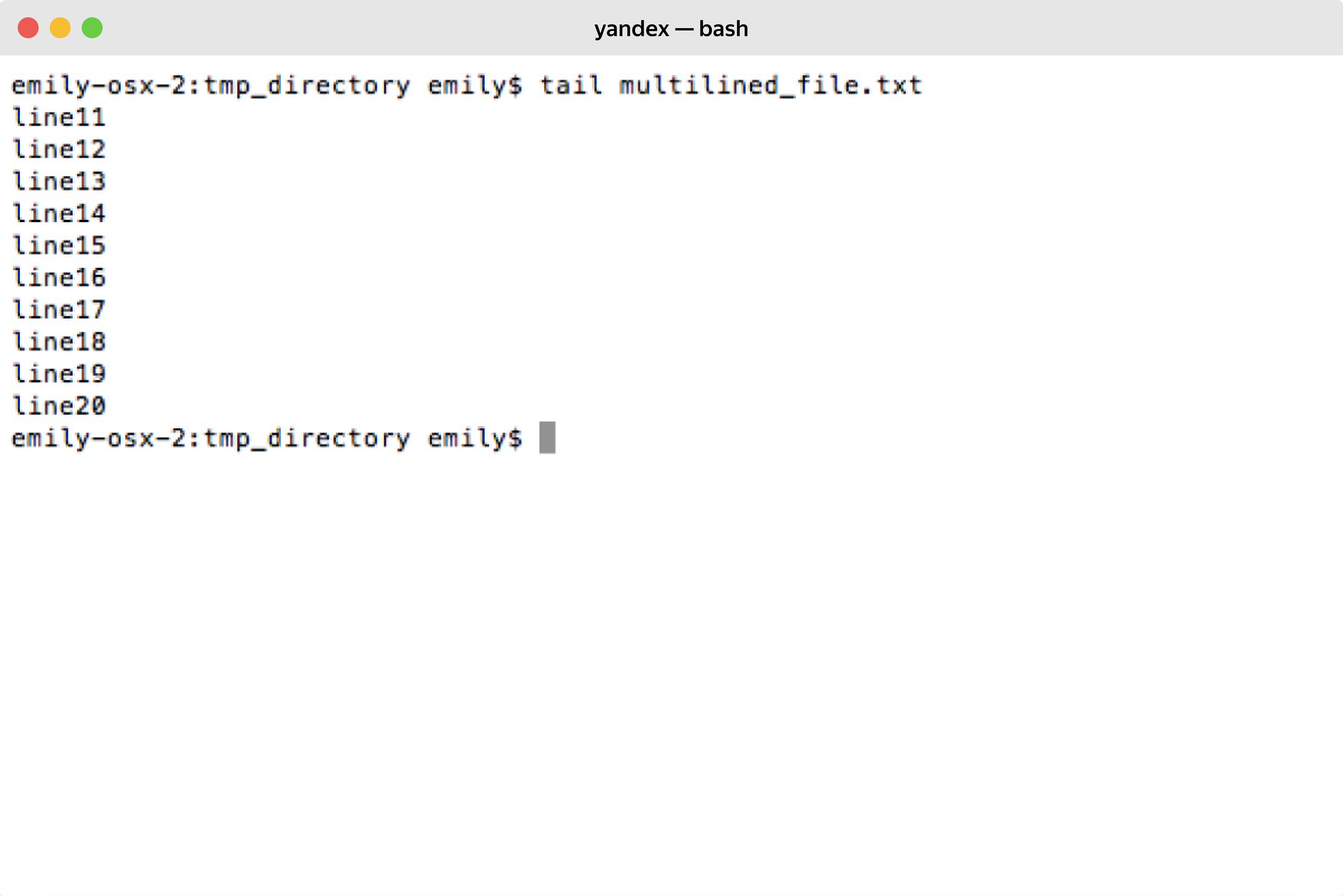
```
emily-osx-2:tmp_directory emily$ head -7 multilined_file.txt
line1
line2
line3
line4
line5
line6
line7
emily-osx-2:tmp_directory emily$ head -4 multilined_file.txt
line1
line2
line3
line4
emily-osx-2:tmp_directory emily$ 
```

tail

- prints the last part of files

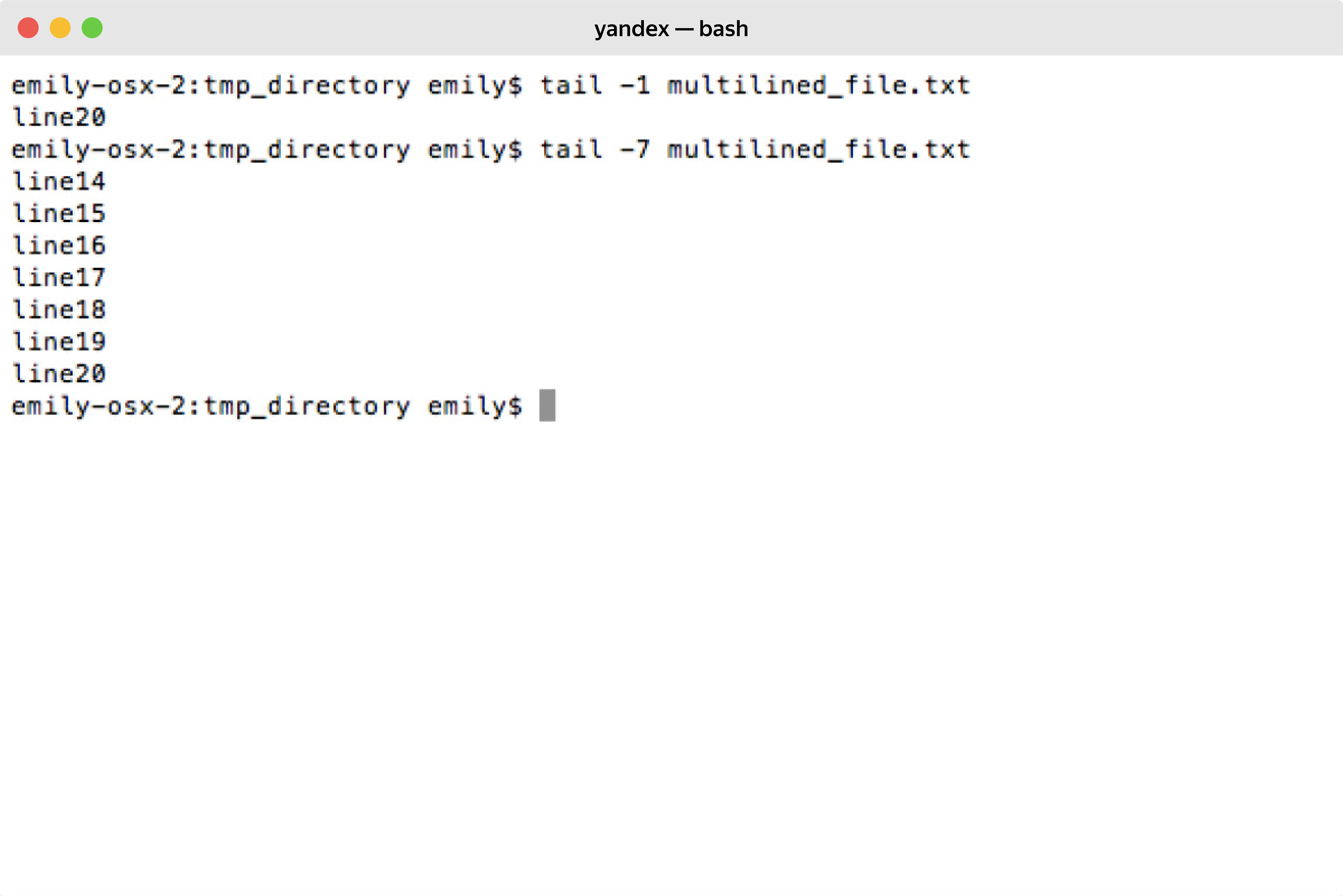
  tail [OPTION]... [FILE]...

tail



```
emily-osx-2:tmp_directory emily$ tail multilined_file.txt
line11
line12
line13
line14
line15
line16
line17
line18
line19
line20
emily-osx-2:tmp_directory emily$ 
```

tail -n

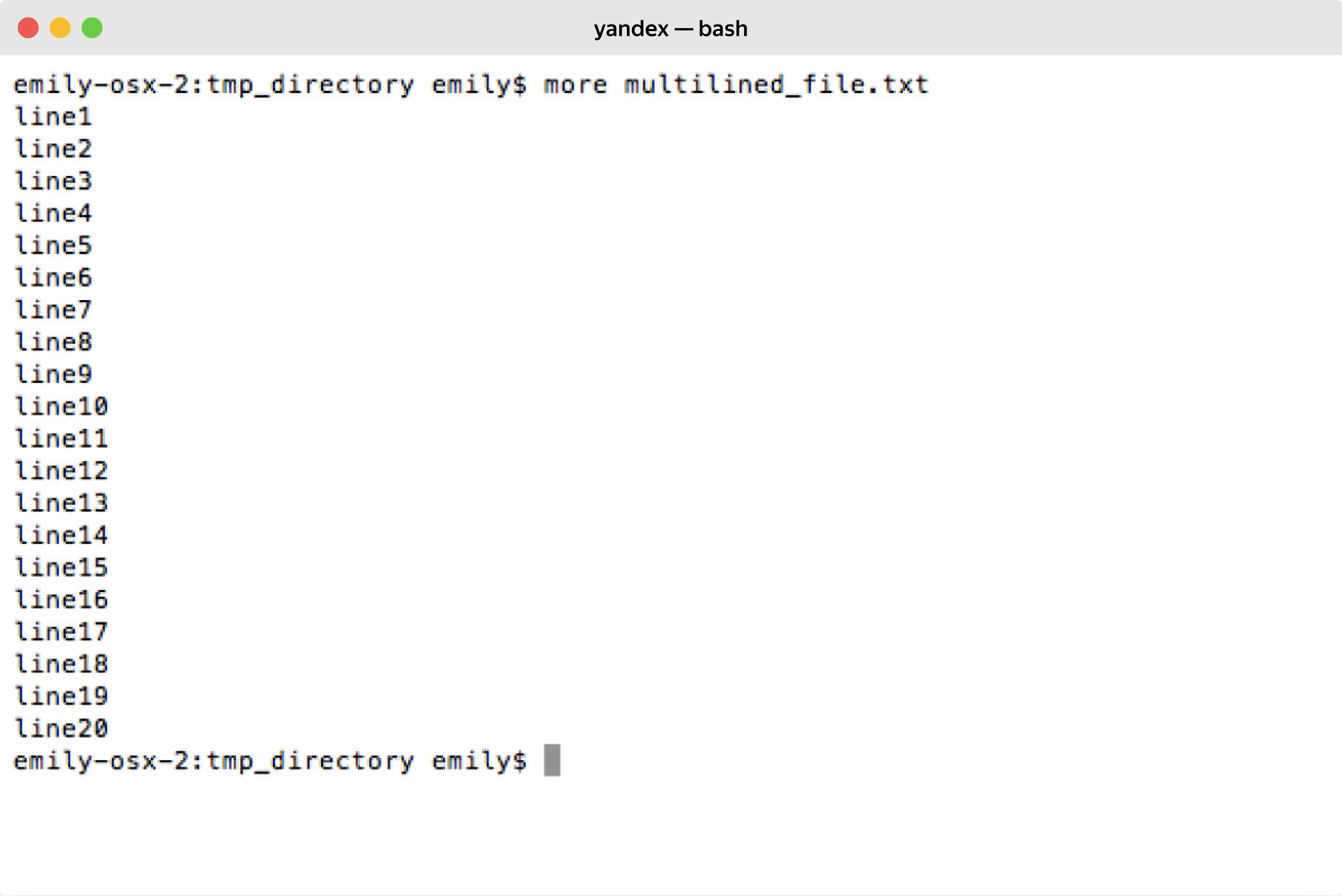


```
emily-osx-2:tmp_directory emily$ tail -1 multilined_file.txt
line20
emily-osx-2:tmp_directory emily$ tail -7 multilined_file.txt
line14
line15
line16
line17
line18
line19
line20
emily-osx-2:tmp_directory emily$ 
```

more

- displays text, one screen at a time

more

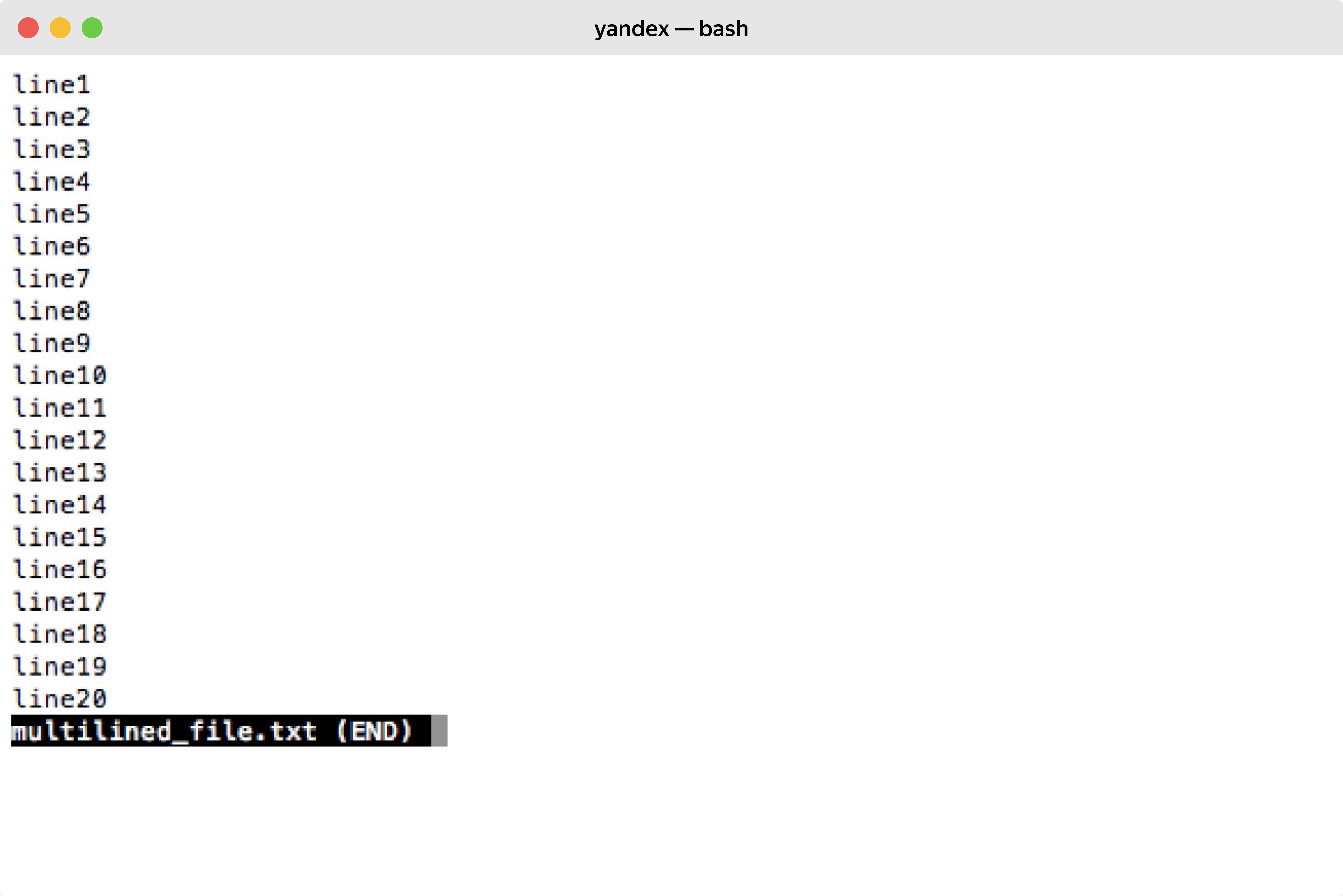


```
emily-osx-2:tmp_directory emily$ more multilined_file.txt
line1
line2
line3
line4
line5
line6
line7
line8
line9
line10
line11
line12
line13
line14
line15
line16
line17
line18
line19
line20
emily-osx-2:tmp_directory emily$ 
```

less

- displays text, allows scrolling

less



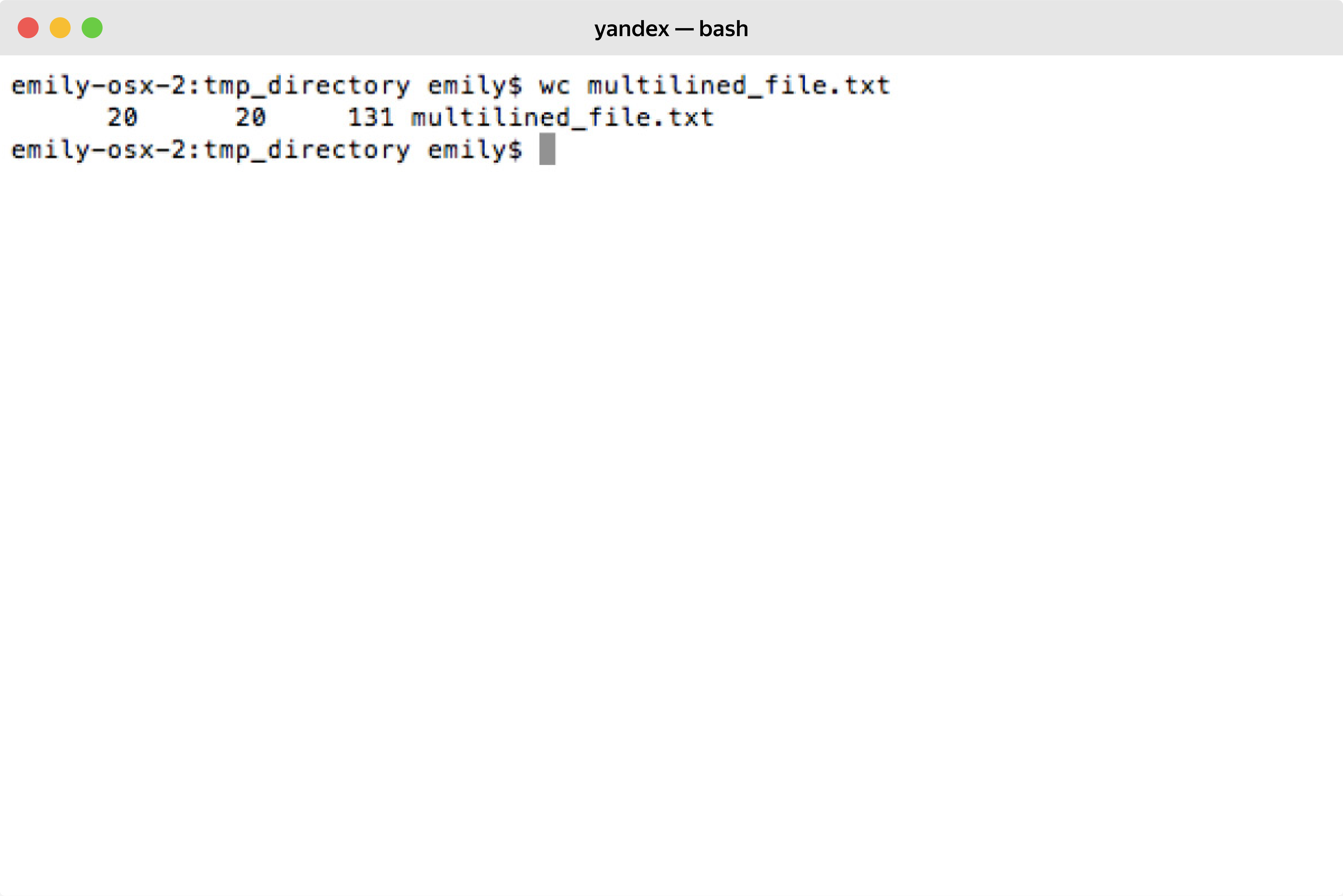
```
line1
line2
line3
line4
line5
line6
line7
line8
line9
line10
line11
line12
line13
line14
line15
line16
line17
line18
line19
line20
multilined_file.txt (END)
```

wc

- "word count" prints a count of lines, words, and bytes for each file

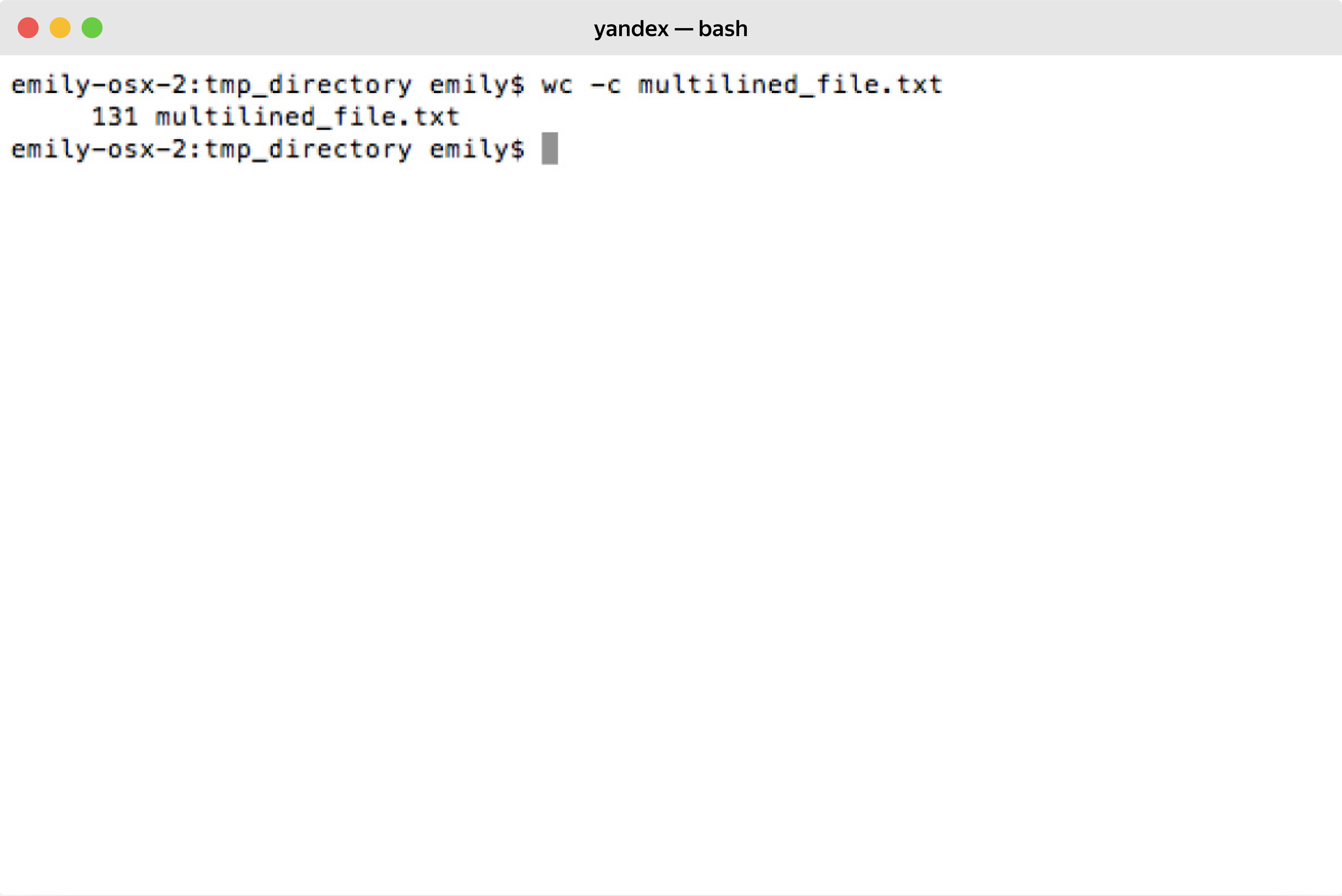
wc [OPTION]... [FILE]...

wc



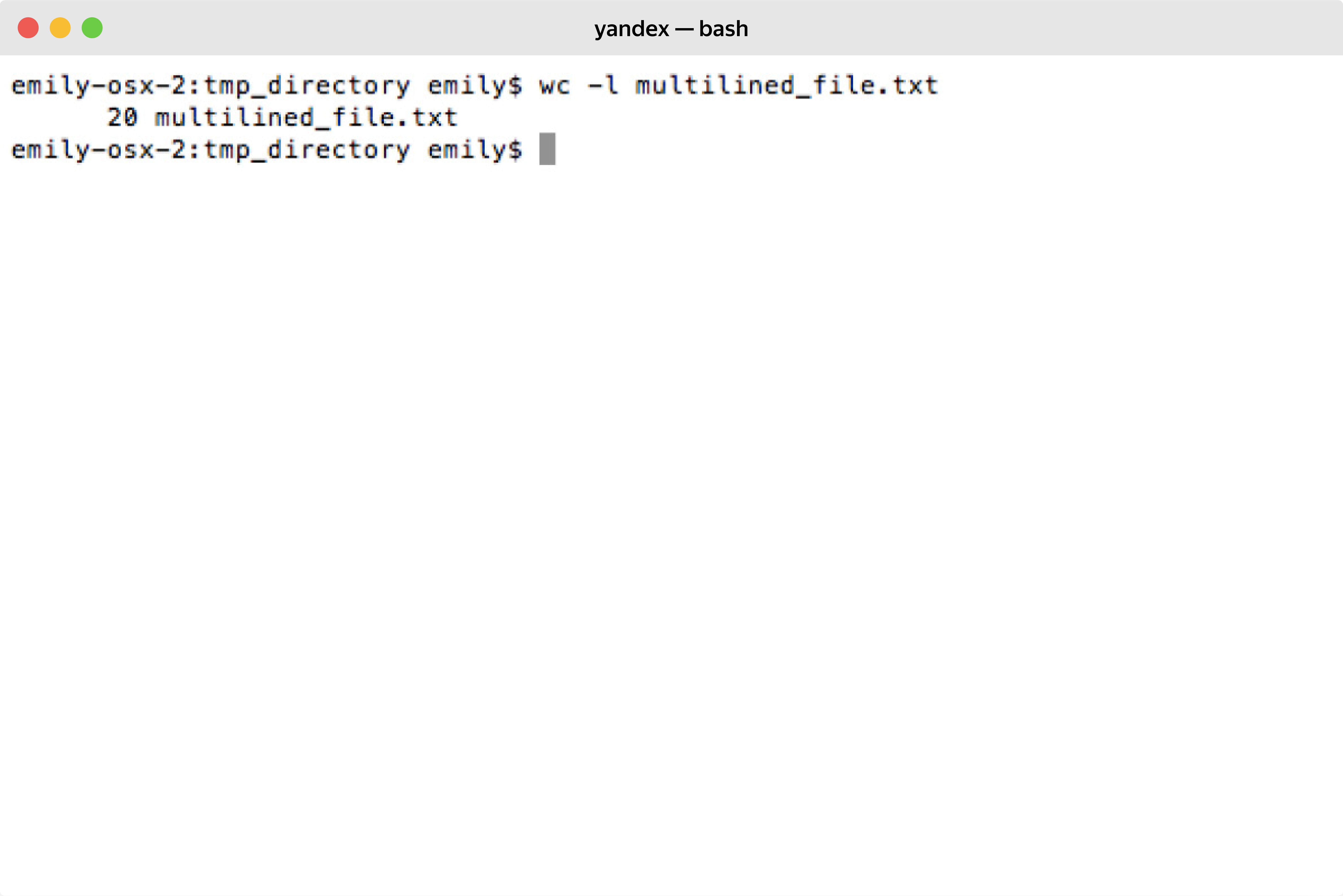
```
emily-osx-2:tmp_directory emily$ wc multilined_file.txt
      20      20     131 multilined_file.txt
emily-osx-2:tmp_directory emily$ 
```

wc -c



```
emily-osx-2:tmp_directory emily$ wc -c multilined_file.txt
     131 multilined_file.txt
emily-osx-2:tmp_directory emily$ 
```

wc -l



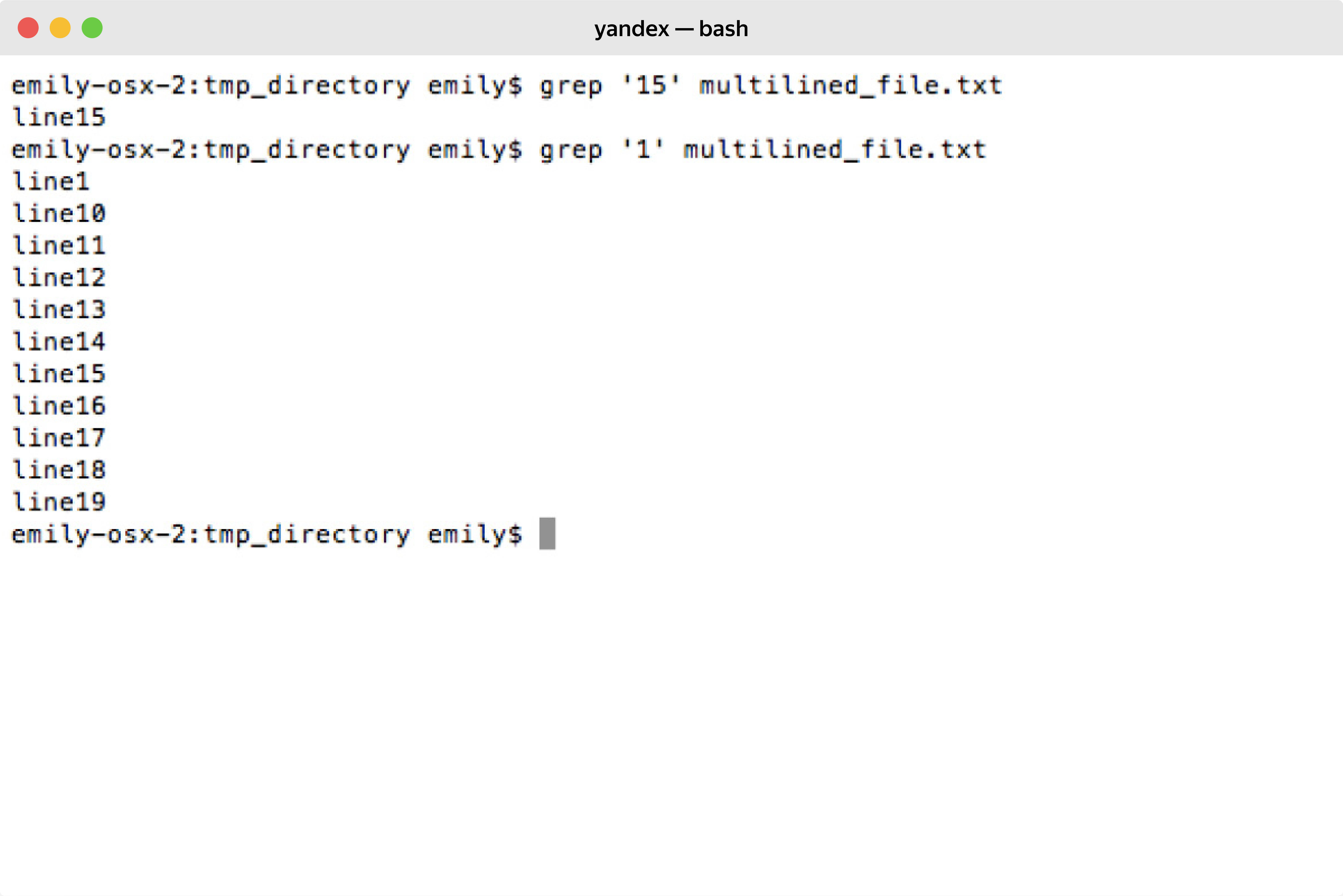
```
emily-osx-2:tmp_directory emily$ wc -l multilined_file.txt
      20 multilined_file.txt
emily-osx-2:tmp_directory emily$ 
```

grep

- "global regular expression print" processes text and prints any lines which match a specified pattern

```
grep [OPTIONS] PATTERN [FILE...]
```

grep



```
emily-osx-2:tmp_directory emily$ grep '15' multilined_file.txt
line15
emily-osx-2:tmp_directory emily$ grep '1' multilined_file.txt
line1
line10
line11
line12
line13
line14
line15
line16
line17
line18
line19
emily-osx-2:tmp_directory emily$ 
```

In-video quiz

- How can we print first 17 lines of “**temporary_logs.txt**”?
- How can we calculate number of lines for file “**temporary_logs.txt**”?
- How can we print all lines from file “**temporary_logs.txt**”, that contains ‘data’ substring?

Outcome

- For exploring files content we use the following commands:
  - **cat** — print file content
  - **head/tail** — print firt/last part of files
  - **more/less** — output file content by screens
  - **wc** — “word count”
  - **grep** — find any lines which match a specified pattern

BigDATAteam