

cse15l-lab-reports

Interesting Options with less

What is less ?

`less` is a command used to display the contents of file or command output, page by page. It can easily help you navigate through the pages - forward and backward through the file.

Sources Used

<https://www.man7.org/linux/man-pages/man1/less.1.html>

<https://www.howtogeek.com/444233/how-to-use-the-less-command-on-linux/>

Notable Differences with Similar Commands

It has faster load times when compared to `vim` or `nano` - making it the ideal command for reading large files. It is similar to `more`, but has more commands similar to `vi` text editor, and supports horizontal scrolling, live monitoring, etc. `less` is somewhat of an improved `more`.

Syntax for using less

```
less [OPTIONS] filename [filename2]
```

Interesting Options

I will be demonstrating all the examples on the file:

written_2/travel_guides/berlitz1/WhatToIndia.txt and WhatToJapan.txt

However, I will only include one screenshot per option (one per 2 examples), because the output of `less` is a new window, and each option behaves similarly regardless of the file.

For reference, running `less written_2/travel_guides/berlitz1/WhatToIndia.txt` opens the following window.

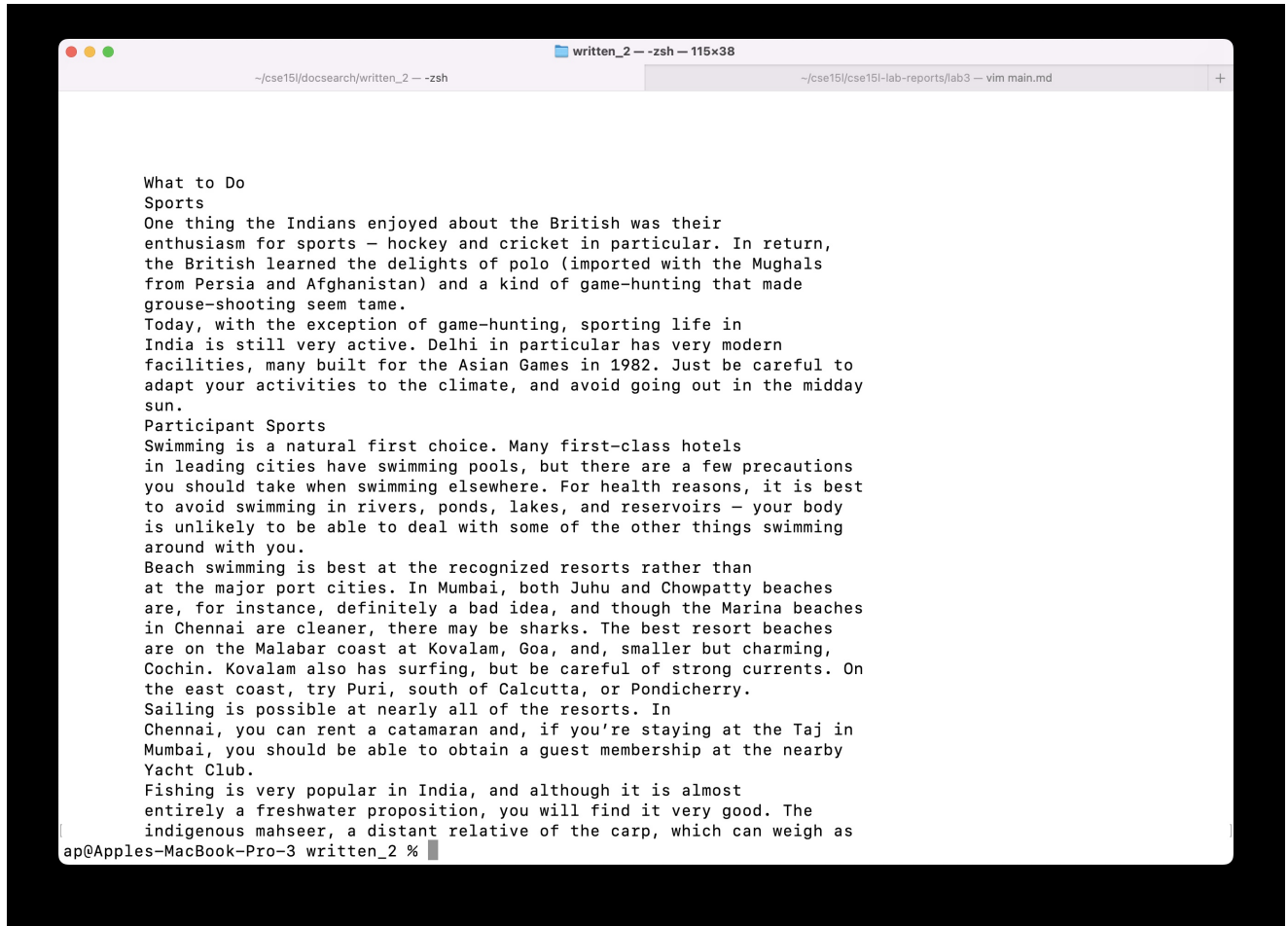
```
written_2 — less -N travel_guides/berlitz1/WhatToIndia.txt — 135x29
~/.cse151/docsearch/written_2 — less -N travel_guides/berlitz1/WhatToIndia.txt
1
2
3
4
5
6   What to Do
7   Sports
8   One thing the Indians enjoyed about the British was their
9   enthusiasm for sports — hockey and cricket in particular. In return,
10  the British learned the delights of polo (imported with the Mughals
11  from Persia and Afghanistan) and a kind of game-hunting that made
12  grouse-shooting seem tame.
13  Today, with the exception of game-hunting, sporting life in
14  India is still very active. Delhi in particular has very modern
15  facilities, many built for the Asian Games in 1982. Just be careful to
16  adapt your activities to the climate, and avoid going out in the midday
17  sun.
18  Participant Sports
19  Swimming is a natural first choice. Many first-class hotels
20  in leading cities have swimming pools, but there are a few precautions
21  you should take when swimming elsewhere. For health reasons, it is best
22  to avoid swimming in rivers, ponds, lakes, and reservoirs — your body
23  is unlikely to be able to deal with some of the other things swimming
24  around with you.
25  Beach swimming is best at the recognized resorts rather than
26  at the major port cities. In Mumbai, both Juhu and Chowpatty beaches
27  are, for instance, definitely a bad idea, and though the Marina beaches
28  in Chennai are cleaner, there may be sharks. The best resort beaches
travel_guides/berlitz1/WhatToIndia.txt
```

- `-N` : displays the line count for every line (as with most code editors like VSCode) for example: try running `less -N written_2/travel_guides/berlitz1/WhatToIndia.txt` and `less -N written_2/travel_guides/berlitz1/WhatToJapan.txt`

```
written_2 — less -X travel_guides/berlitz1/WhatToIndia.txt — 135x29
~/.cse151/docsearch/written_2 — less -X travel_guides/berlitz1/WhatToIndia.txt
   What to Do
   Sports
   One thing the Indians enjoyed about the British was their
   enthusiasm for sports — hockey and cricket in particular. In return,
   the British learned the delights of polo (imported with the Mughals
   from Persia and Afghanistan) and a kind of game-hunting that made
   grouse-shooting seem tame.
   Today, with the exception of game-hunting, sporting life in
   India is still very active. Delhi in particular has very modern
   facilities, many built for the Asian Games in 1982. Just be careful to
   adapt your activities to the climate, and avoid going out in the midday
   sun.
   Participant Sports
   Swimming is a natural first choice. Many first-class hotels
   in leading cities have swimming pools, but there are a few precautions
   you should take when swimming elsewhere. For health reasons, it is best
   to avoid swimming in rivers, ponds, lakes, and reservoirs — your body
   is unlikely to be able to deal with some of the other things swimming
   around with you.
   Beach swimming is best at the recognized resorts rather than
   at the major port cities. In Mumbai, both Juhu and Chowpatty beaches
   are, for instance, definitely a bad idea, and though the Marina beaches
   in Chennai are cleaner, there may be sharks. The best resort beaches
travel_guides/berlitz1/WhatToIndia.txt
```

- `-X` : it keeps the contents of the file on the screen, until where the user has scrolled. for example: try running `less -X written_2/travel_guides/berlitz1/WhatToIndia.txt` and

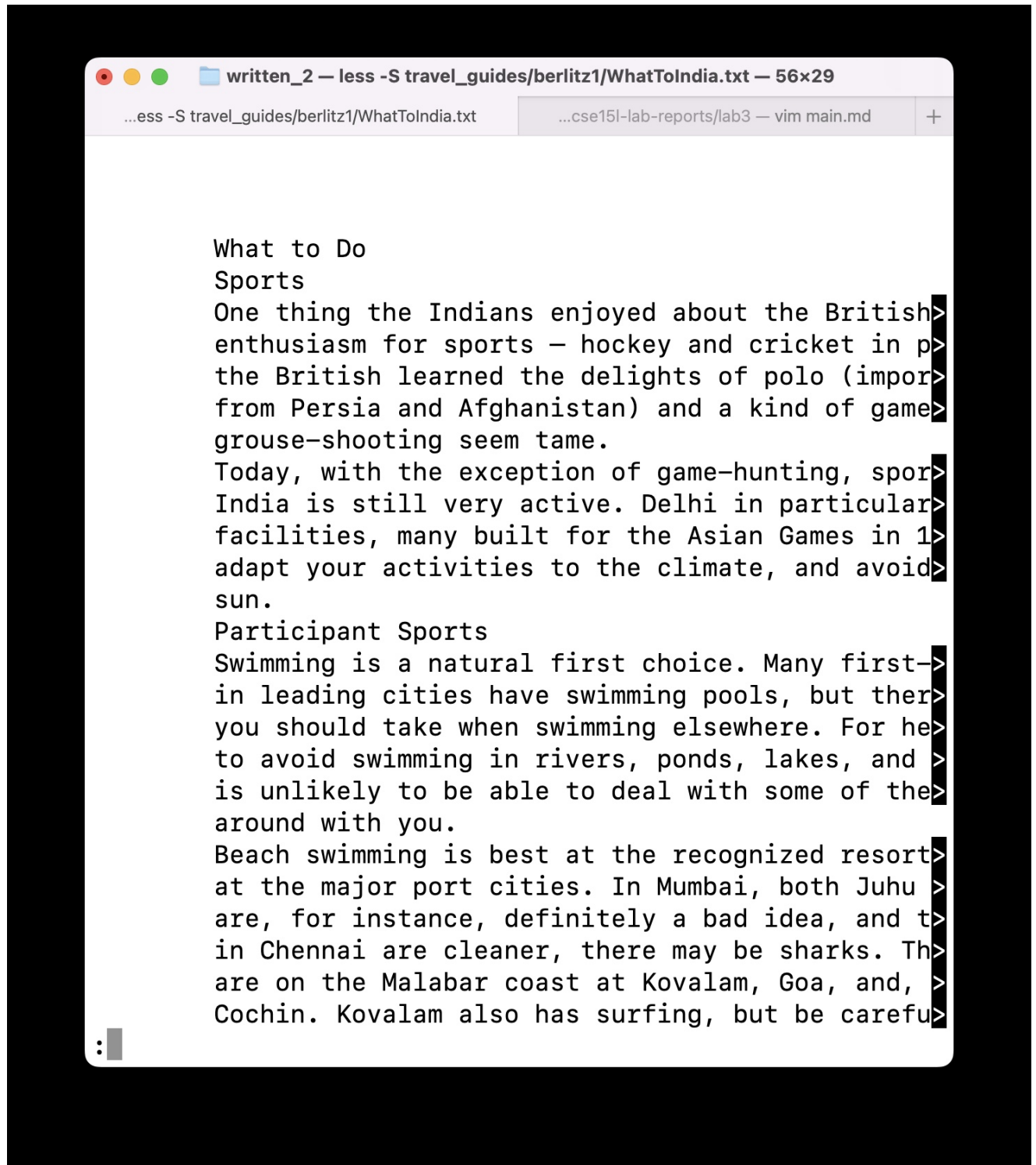
```
less -X written_2/travel_guides/berlitz1/WhatToJapan.txt
```



```
What to Do
Sports
One thing the Indians enjoyed about the British was their
enthusiasm for sports – hockey and cricket in particular. In return,
the British learned the delights of polo (imported with the Mughals
from Persia and Afghanistan) and a kind of game-hunting that made
grouse-shooting seem tame.
Today, with the exception of game-hunting, sporting life in
India is still very active. Delhi in particular has very modern
facilities, many built for the Asian Games in 1982. Just be careful to
adapt your activities to the climate, and avoid going out in the midday
sun.
Participant Sports
Swimming is a natural first choice. Many first-class hotels
in leading cities have swimming pools, but there are a few precautions
you should take when swimming elsewhere. For health reasons, it is best
to avoid swimming in rivers, ponds, lakes, and reservoirs – your body
is unlikely to be able to deal with some of the other things swimming
around with you.
Beach swimming is best at the recognized resorts rather than
at the major port cities. In Mumbai, both Juhu and Chowpatty beaches
are, for instance, definitely a bad idea, and though the Marina beaches
in Chennai are cleaner, there may be sharks. The best resort beaches
are on the Malabar coast at Kovalam, Goa, and, smaller but charming,
Cochin. Kovalam also has surfing, but be careful of strong currents. On
the east coast, try Puri, south of Calcutta, or Pondicherry.
Sailing is possible at nearly all of the resorts. In
Chennai, you can rent a catamaran and, if you're staying at the Taj in
Mumbai, you should be able to obtain a guest membership at the nearby
Yacht Club.
Fishing is very popular in India, and although it is almost
entirely a freshwater proposition, you will find it very good. The
indigenous mahseer, a distant relative of the carp, which can weigh as
ap@Apples-MacBook-Pro-3 written_2 %
```

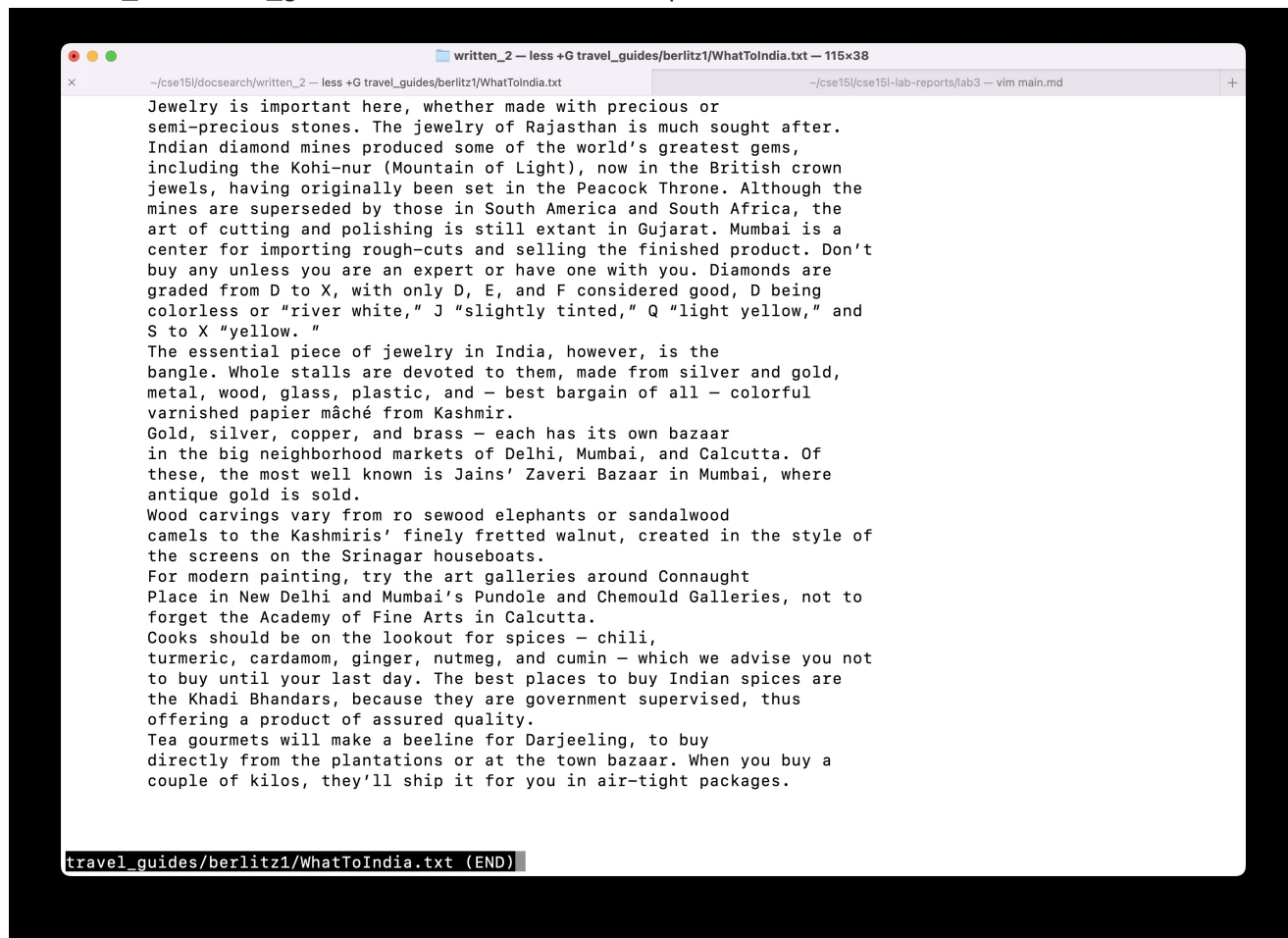
- `-s` : chops long lines longer than the width of the screen to be chopped rather than wrapped. So, you would need to use the right arrow to see what's to the right, instead of it wrapping down. This preserves the line length and structure of the file. for example: try running `less -S written_2/travel_guides/berlitz1/WhatToIndia.txt` and `less -S`

written_2/travel_guides/berlitz1/WhatToJapan.txt



- +G : opens at the end of the file instead of the beginning. In general, + as a modifier runs the following command in less while opening. for example: try running `less +G written_2/travel_guides/berlitz1/WhatToIndia.txt` and `less +G`

written_2/travel_guides/berlitz2/WhatToJapan.txt



```
written_2 — less +G travel_guides/berlitz1/WhatToIndia.txt — 115x38
~/cse15l/docsearch/written_2 — less +G travel_guides/berlitz1/WhatToIndia.txt
~/cse15l/cse15l-lab-reports/lab3 — vim main.md

Jewelry is important here, whether made with precious or
semi-precious stones. The jewelry of Rajasthan is much sought after.
Indian diamond mines produced some of the world's greatest gems,
including the Kohi-nur (Mountain of Light), now in the British crown
jewels, having originally been set in the Peacock Throne. Although the
mines are superseded by those in South America and South Africa, the
art of cutting and polishing is still extant in Gujarat. Mumbai is a
center for importing rough-cuts and selling the finished product. Don't
buy any unless you are an expert or have one with you. Diamonds are
graded from D to X, with only D, E, and F considered good, D being
colorless or "river white," J "slightly tinted," Q "light yellow," and
S to X "yellow. "
The essential piece of jewelry in India, however, is the
bangle. Whole stalls are devoted to them, made from silver and gold,
metal, wood, glass, plastic, and — best bargain of all — colorful
varnished papier mâché from Kashmir.
Gold, silver, copper, and brass — each has its own bazaar
in the big neighborhood markets of Delhi, Mumbai, and Calcutta. Of
these, the most well known is Jains' Zaveri Bazaar in Mumbai, where
antique gold is sold.
Wood carvings vary from rosewood elephants or sandalwood
camels to the Kashmiris' finely fretted walnut, created in the style of
the screens on the Srinagar houseboats.
For modern painting, try the art galleries around Connaught
Place in New Delhi and Mumbai's Pundole and Chemould Galleries, not to
forget the Academy of Fine Arts in Calcutta.
Cooks should be on the lookout for spices — chili,
turmeric, cardamom, ginger, nutmeg, and cumin — which we advise you not
to buy until your last day. The best places to buy Indian spices are
the Khadi Bhandars, because they are government supervised, thus
offering a product of assured quality.
Tea gourmets will make a beeline for Darjeeling, to buy
directly from the plantations or at the town bazaar. When you buy a
couple of kilos, they'll ship it for you in air-tight packages.

travel_guides/berlitz1/WhatToIndia.txt (END)
```