cse15l-lab-reports

Using the grep Command in Git Bash

1.) Search recursively with -r 🔗

-r makes grep search recursively through all directories and files in the current working directory

As you can see, it searched through everything in the `skill-demo-1` directory and found all the files containing the string "Lucayans".

None of the files in `skill-demo-1` contain the string "testing123", so it returns nothing.

2.) Ignore case distinctions with -i

-i ignores case when searching for a specific string, so any sequence that matches the letters will return

```
$ grep -r -i "lucayans"
written_2/travel_guides/berlitz2/Bahamas-History.txt:Centuries before the arrival of Columbus, a peaceful Amerindian
people who called themselves the Luccucairi had settled in the Bahamas. Originally from South America, they had trave
led up through the Caribbean islands, surviving by cultivating modest crops and from what they caught from sea and sh
ore. Nothing in the experience of these gentle people could have prepared them for the arrival of the Pinta, the Niña
, and the Santa Maria at San Salvador on 12 October 1492. Columbus believed that he had reached the East Indies and m
istakenly called these people Indians. We know them today as the Lucayans. Columbus claimed the island and others in
the Bahamas for his royal Spanish patrons, but not finding the gold and other riches he was seeking, he stayed for on
ly two weeks before sailing towards Cuba.
written_2/travel_guides/berlitz2/Bahamas-History.txt:The Spaniards never bothered to settle in the Bahamas, but the n
umber of shipwrecks attest that their galleons frequently passed through the archipelago en route to and from the Car
ibbean, Florida, Bermuda, and their home ports. On Eleuthera the explorers dug a fresh-water well — at a spot now kno
wn as "Spanish Wells" — which was used to replenish the supplies of water on their ships before they began the long j
ourney back to Europe with their cargoes of South American gold. As for the Lucayans, within 25 years all of them, pe
rhaps some 30,000 people, were removed from the Bahamas to work — and die — in Spanish gold mines and on farms and pe
arl fisheries on Hispaniola (Haiti), Cuba, and elsewhere in the Caribbean.
```

```
wucon@DESKTOP-EGE4GMK MINGW64 ~/skill-demo1-data (main)
$ grep -i "thirtieth street station" written_2/non-fiction/OUP/Rybczynski/*.txt
written_2/non-fiction/OUP/Rybczynski/ch1.txt:This is not to say that good architecture is merely utilitarian. One of
the grandest spaces in Philadelphia is the concourse of Thirtieth Street Station, which was built in 1934 for the Pen
nsylvania Railroad by the accomplished Chicago architects Graham, Anderson, Probst & White, the successor firm of Dan
iel H. Burnham. The magnificent room, 290 feet long and almost 100 feet high, is covered by a flat coffered ceiling d
ecorated in red, gold, and cream. Diffused light streams in from tall windows on both sides. Almost nothing in this m
emorable space—the gilded Art Deco chandeliers, the travertine walls, the massive Corinthian columns at each end—was
a product of its rather mundane function: to provide a waiting space for people, before they descended the staircases
 that led to the platforms below. But the railroad station concourse in the heyday of railroad travel, was more than
merely a place to get on and off trains. It was a gateway to the city, as well as a symbol of unreserved faith in mod
ern transportation—and in the Pennsylvania Railroad. That is why it was appropriate for delight to take precedence ov
er commodity.
written_2/non-fiction/OUP/Rybczynski/ch1.txt:Yet delight is not uniform. The Main Concourse of Grand Central Terminal
 in New York City, for example, offers different pleasures than Thirtieth Street Station. The monumental spaces are c
omparable in size and function. They are both well built. Similar spaces, similar materials, yet the experience of th
e two concourses is different. Both buildings are inspired by the Classical architecture of the past, but Grand Centr
al, which opened in 1913, is a modified version of Beaux-Arts Classicism, whereas the Philadelphia station, despite t
he Corinthian columns, is simplified, abstracted, and stylized, what historians called "stripped Classicism." As a re
sult, Grand Central is dramatic, visually rich in its details, almost Wagnerian; Thirtieth Street is equally dramatic
 but in a way that is coolly geometrical and sleekly urbane—not Wagner, Cole Porter. Style is evident in the smallest
 details. It ensures a continuity between the great vaulted sky of Grand Central and the ticket counters, or between
the Thirtieth Street chandeliers and the announcement boards at each track stair. It is the visual language of a buil
ding. Architectural style is the manner in which the architect communicates a particular kind of visual delight, in l
arge ways and small.
```

Note: "lucayans" and "thirtieth street station" do not actually exist in any files within written_2. This command without -i would return nothing.

3.) Listing only filenames with -l

-l lists only the names of the files containing the string(s)

```
wucon@DESKTOP-EGE4GMK MINGW64 ~/skill-demo1-data (main)
$ grep -r -l "Lucayans"
written_2/travel_guides/berlitz2/Bahamas-History.txt
```

```
wucon@DESKTOP-EGE4GMK MINGW64 ~/skill-demo1-data (main)
$ grep -r -l "Cheese"
written_2/travel_guides/berlitz1/WhatToDublin.txt
written_2/travel_guides/berlitz2/Amsterdam-WhereToGo.txt
written_2/travel_guides/berlitz2/Portugal-WhereToGo.txt
```

Note: this is useful for commonly recurring strings that will return a lot of files

4.) show only the matching part of a line with -o

```
wucon@DESKTOP-EGE4GMK MINGW64 ~/skill-demo1-data/written_2/non-fiction/OUP/Castro (main)
$ grep -o "Spanish gypsies" *.txt
chC.txt:Spanish gypsies
chP.txt:Spanish gypsies
```

```
wucon@DESKTOP-EGE4GMK MINGW64 ~/skill-demo1-data/written_2/non-fiction/OUP/Castro (main)
$ grep -o "Spanish gypsies" *.txt
chC.txt:Spanish gypsies
chP.txt:Spanish gypsies
```

Note: this is useful when searching for things like prefixes or suffixes that would appear in many different words.

All command information was found using `grep --help` in bash, no external sources were used.