Search Directory

Lists the files corresponding to a search query inside the given directory.

Synopsis

`search_directory DIRECTORY SEARCH_QUERY`

Description

The program searches for SEARCH_QUERY in each file under DIRECTORY, returning a list of unique file paths. A file is said to "match the search query" if it satisfies **any** of the following conditions:

File name condition

The search query is a substring of the file name. For example, a file with path:
`/home/candidate/documents/sales_report.txt` has a name `sales_report.txt` that **matches** the queries:

- port
- sal
- sales_report
- report
- .txt

but does **not match** the queries:

- documents
- candidate
- sales-report

File content condition

The search query is a substring of the file content. For example, a file whose content is:

`"This is an example file. Do not delete this example."`

matches the query "ample", but does not match the query "readme".

Additional Program Behavior

- The search only matches files, not folders.
- The search is case sensitive.
- The search provides a list of files that match the search query, sorted by decreasing number of "query occurrences". The number of "query occurrences" is defined as a sum of two contributions:
    - The number of times the search query appears in the file name. Do not count overlapping appearances of the search query. For example, in the filename `sales_report_0000.txt`, the query "report" occurs once, the query "00" occurs twice, and the query "t" occurs three times.
    - The number of times the search query appears in the file content. As in above, do not count overlapping appearances of the search query.
- For files with equal number of "query occurrences", they are sorted by ascending lexicographic order of the path.
- The search only supports the case where DIRECTORY contains exclusively ASCII files.
- The search query only supports the following characters: alphanumeric characters (i.e. a-z, A-Z, 0-9), underscores, dashes, and dots.

Example Output

If DIRECTORY is an absolute path:

```
/home/candidate/documents/daily.txt
/home/candidate/documents/work/2017/summary_report.txt
```

If DIRECTORY is a relative path:

```
./daily.txt
./work/2017/summary_report.txt
```