```
!pip install streamlit
     Collecting streamlit
      Downloading streamlit-1.34.0-py2.py3-none-any.whl (8.5 MB)
                                                    - 8.5/8.5 MB 16.3 MB/s eta 0:00:00
     Requirement already satisfied: altair<6,>=4.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (4.2.2)
     Requirement already satisfied: blinker<2,>=1.0.0 in /usr/lib/python3/dist-packages (from streamlit) (1.4)
     Requirement already satisfied: cachetools<6,>=4.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (5.3.3)
     Requirement already satisfied: click<9,>=7.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (8.1.7)
     Requirement already satisfied: numpy<2,>=1.19.3 in /usr/local/lib/python3.10/dist-packages (from streamlit) (1.25.2)
     Requirement already satisfied: packaging<25,>=16.8 in /usr/local/lib/python3.10/dist-packages (from streamlit) (24.0)
     Requirement already satisfied: pandas<3,>=1.3.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (2.0.3)
     Requirement already satisfied: pillow<11,>=7.1.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (9.4.0)
     Requirement already satisfied: protobuf<5,>=3.20 in /usr/local/lib/python3.10/dist-packages (from streamlit) (3.20.3)
     Requirement already satisfied: pyarrow>=7.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (14.0.2)
     Requirement already satisfied: requests<3,>=2.27 in /usr/local/lib/python3.10/dist-packages (from streamlit) (2.31.0)
     Requirement already satisfied: rich<14,>=10.14.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (13.7.1)
     Requirement already satisfied: tenacity<9,>=8.1.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (8.2.3)
     Requirement already satisfied: toml<2,>=0.10.1 in /usr/local/lib/python3.10/dist-packages (from streamlit) (0.10.2)
     Requirement already satisfied: typing-extensions<5,>=4.3.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (4.11.0)
     Collecting gitpython!=3.1.19,<4,>=3.0.7 (from streamlit)
       Downloading GitPython-3.1.43-py3-none-any.whl (207 kB)
                                                    207.3/207.3 kB 13.9 MB/s eta 0:00:00
     Collecting pydeck<1,>=0.8.0b4 (from streamlit)
       Downloading pydeck-0.9.0-py2.py3-none-any.whl (6.9 MB)
                                                    - 6.9/6.9 MB 41.3 MB/s eta 0:00:00
     Requirement already satisfied: tornado<7,>=6.0.3 in /usr/local/lib/python3.10/dist-packages (from streamlit) (6.3.3)
     Collecting watchdog>=2.1.5 (from streamlit)
       Downloading watchdog-4.0.0-py3-none-manylinux2014_x86_64.whl (82 kB)
                                                    83.0/83.0 kB 5.5 MB/s eta 0:00:00
     Requirement already satisfied: entrypoints in /usr/local/lib/python3.10/dist-packages (from altair<6,>=4.0->streamlit) (0.4)
     Requirement already satisfied: jinja2 in /usr/local/lib/python3.10/dist-packages (from altair<6,>=4.0->streamlit) (3.1.3)
     Requirement already satisfied: jsonschema>=3.0 in /usr/local/lib/python3.10/dist-packages (from altair<6,>=4.0->streamlit) (4.19.2)
     Requirement already satisfied: toolz in /usr/local/lib/python3.10/dist-packages (from altair<6,>=4.0->streamlit) (0.12.1)
     Collecting gitdb<5,>=4.0.1 (from gitpython!=3.1.19,<4,>=3.0.7->streamlit)
       Downloading gitdb-4.0.11-py3-none-any.whl (62 kB)
                                                   - 62.7/62.7 kB 6.9 MB/s eta 0:00:00
     Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.10/dist-packages (from pandas<3,>=1.3.0->streamlit) (2.
     Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-packages (from pandas<3,>=1.3.0->streamlit) (2023.4)
     Requirement already satisfied: tzdata>=2022.1 in /usr/local/lib/python3.10/dist-packages (from pandas<3,>=1.3.0->streamlit) (2024.1)
     Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->streamlit)
     Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->streamlit) (3.7)
     Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->streamlit) (2.0.7
     Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->streamlit) (2024.
     Requirement already satisfied: markdown-it-py>=2.2.0 in /usr/local/lib/python3.10/dist-packages (from rich<14,>=10.14.0->streamlit) (3.
     Requirement already satisfied: pygments<3.0.0,>=2.13.0 in /usr/local/lib/python3.10/dist-packages (from rich<14,>=10.14.0->streamlit) (
     \label{localization} Collecting \ smmap < 6, >= 3.0.1 \ (from \ gitdb < 5, >= 4.0.1 - \ y itpython! = 3.1.19, < 4, >= 3.0.7 - \ y streamlit)
       Downloading smmap-5.0.1-py3-none-any.whl (24 kB)
     Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.10/dist-packages (from jinja2->altair<6,>=4.0->streamlit) (2.1
     Requirement already satisfied: attrs>=22.2.0 in /usr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->streamli
     Requirement already satisfied: jsonschema-specifications>=2023.03.6 in /usr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->a
     Requirement already satisfied: referencing>=0.28.4 in /usr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->st
     Requirement already satisfied: rpds-py>=0.7.1 in /usr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->streaml
     Requirement already satisfied: mdurl~=0.1 in /usr/local/lib/python3.10/dist-packages (from markdown-it-py>=2.2.0->rich<14,>=10.14.0->st
     Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/dist-packages (from python-dateutil>=2.8.2->pandas<3,>=1.3.0->stre
     Installing collected packages: watchdog, smmap, pydeck, gitdb, gitpython, streamlit
     Successfully installed gitdb-4.0.11 gitpython-3.1.43 pydeck-0.9.0 smmap-5.0.1 streamlit-1.34.0 watchdog-4.0.0
!wget -q -0 - ipv4.icanhazip.com
     34.125.155.198
! streamlit run main.py & npx localtunnel --port 8501
     Collecting usage statistics. To deactivate, set browser.gatherUsageStats to false.
       You can now view your Streamlit app in your browser.
       Network URL: <a href="http://172.28.0.12:8501">http://172.28.0.12:8501</a>
       External URL: <a href="http://34.125.155.198:8501">http://34.125.155.198:8501</a>
     npx: installed 22 in 4.747s
     your url is: <a href="https://cold-onions-wink.loca.lt">https://cold-onions-wink.loca.lt</a>
     2024-05-08 07:20:34.110 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
     st.cache data` or `st.cache resource`.
     More information [in our docs](<a href="https://docs.streamlit.io/library/advanced-features/caching">https://docs.streamlit.io/library/advanced-features/caching</a>).
```

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2024-05-08 07:20:44.198 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
`st.cache_data` or `st.cache_resource`.
More information [in our docs](https://docs.streamlit.io/library/advanced-features/caching).
2024-05-08 07:20:46.930 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
`st.cache_data` or `st.cache_resource`.
More information [in our docs](<a href="https://docs.streamlit.io/library/advanced-features/caching">https://docs.streamlit.io/library/advanced-features/caching</a>).
2024-05-08 07:20:48.420 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
 `st.cache_data` or `st.cache_resource`.
More information [in our docs](<a href="https://docs.streamlit.io/library/advanced-features/caching">https://docs.streamlit.io/library/advanced-features/caching</a>). 2024-05-08 07:20:51.481 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
`st.cache_data` or `st.cache_resource`.
More information [in our docs](<a href="https://docs.streamlit.io/library/advanced-features/caching">https://docs.streamlit.io/library/advanced-features/caching</a>).
2024-05-08 07:20:55.101 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
 st.cache_data` or `st.cache_resource`.
More information [in our docs](<a href="https://docs.streamlit.io/library/advanced-features/caching">https://docs.streamlit.io/library/advanced-features/caching</a>). 2024-05-08 07:21:01.287 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
`st.cache_data` or `st.cache_resource`.
More information [in our docs](<a href="https://docs.streamlit.io/library/advanced-features/caching">https://docs.streamlit.io/library/advanced-features/caching</a>).
2024-05-08 07:21:03.439 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
 'st.cache_data' or 'st.cache_resource'.
More information [in our docs](<a href="https://docs.streamlit.io/library/advanced-features/caching">https://docs.streamlit.io/library/advanced-features/caching</a>).
2024-05-08 07:21:05.786 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
`st.cache_data` or `st.cache_resource`.
More information [in our docs](<a href="https://docs.streamlit.io/library/advanced-features/caching">https://docs.streamlit.io/library/advanced-features/caching</a>).
2024-05-08 07:21:06.897 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
`st.cache_data` or `st.cache_resource`.
More information [in our docs](<a href="https://docs.streamlit.io/library/advanced-features/caching">https://docs.streamlit.io/library/advanced-features/caching</a>).
2024-05-08 07:21:07.938 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
 st.cache_data` or `st.cache_resource`.
\label{thm:more information of thm:more information} \begin{subarray}{ll} \textbf{More information [in our docs]($https://docs.streamlit.io/library/advanced-features/caching).} \end{subarray}
2024-05-08 07:21:10.719 `st.cache` is deprecated. Please use one of Streamlit's new caching commands,
```