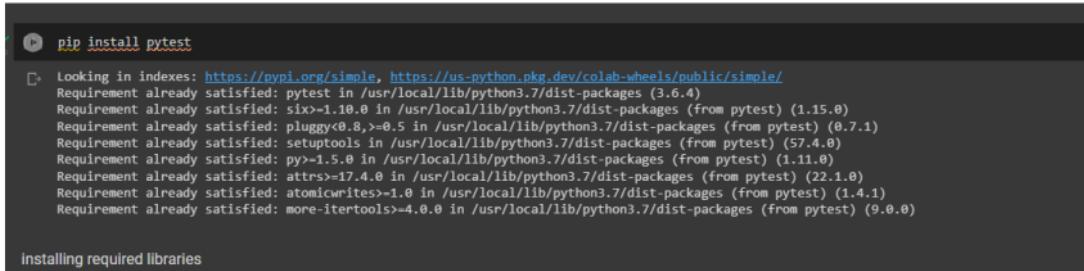


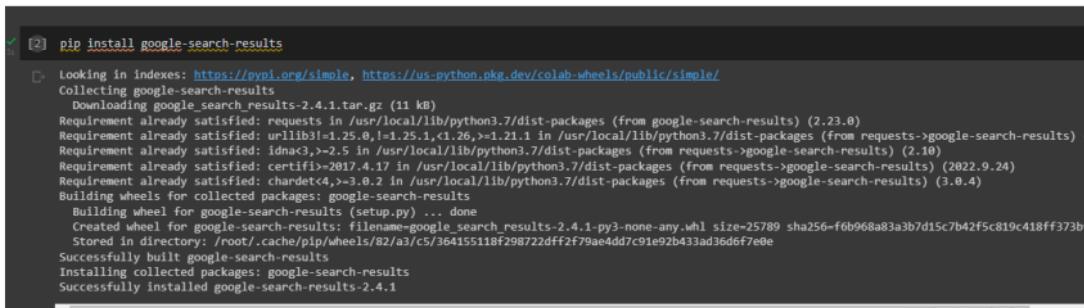
Milestone 2:



```
pip install pytest
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/
Requirement already satisfied: pytest in /usr/local/lib/python3.7/dist-packages (3.6.4)
Requirement already satisfied: six>=1.10.0 in /usr/local/lib/python3.7/dist-packages (from pytest) (1.15.0)
Requirement already satisfied: pluggy<0.8,>=0.5 in /usr/local/lib/python3.7/dist-packages (from pytest) (0.7.1)
Requirement already satisfied: setuptools in /usr/local/lib/python3.7/dist-packages (from pytest) (57.4.0)
Requirement already satisfied: py>=1.5.0 in /usr/local/lib/python3.7/dist-packages (from pytest) (1.11.0)
Requirement already satisfied: attrs>=17.4.0 in /usr/local/lib/python3.7/dist-packages (from pytest) (22.1.0)
Requirement already satisfied: atomicwrites>=1.0 in /usr/local/lib/python3.7/dist-packages (from pytest) (1.4.1)
Requirement already satisfied: more-itertools>=4.0.0 in /usr/local/lib/python3.7/dist-packages (from pytest) (9.0.0)

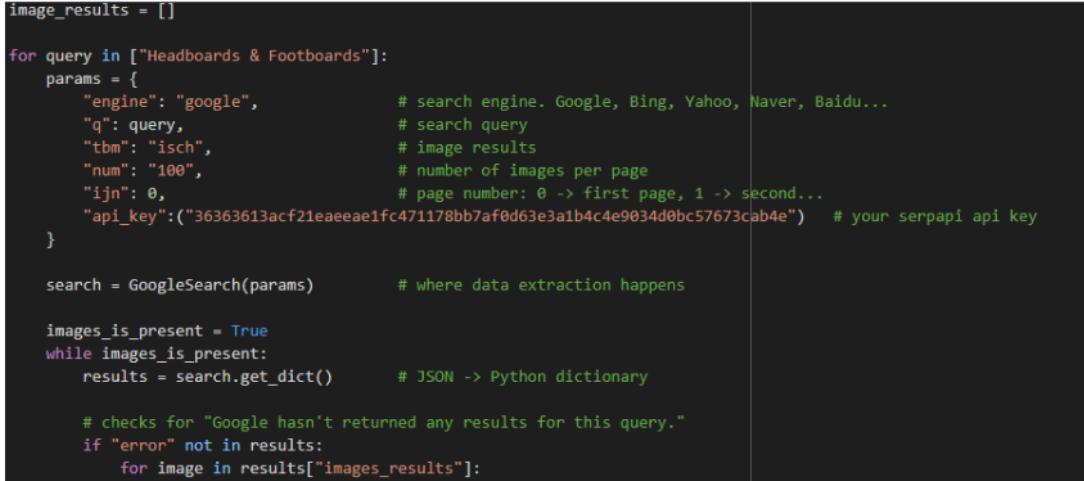
installing required libraries
```

Figure 1: Library installation 1



```
pip install google-search-results
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/
Collecting google-search-results
  Downloading google_search_results-2.4.1.tar.gz (11 kB)
    Requirement already satisfied: requests in /usr/local/lib/python3.7/dist-packages (from google-search-results) (2.23.0)
    Requirement already satisfied: idna<3,>=2.5 in /usr/local/lib/python3.7/dist-packages (from requests->google-search-results) (2.10)
    Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.7/dist-packages (from requests->google-search-results) (2022.9.24)
    Requirement already satisfied: charset<4,>=3.0.2 in /usr/local/lib/python3.7/dist-packages (from requests->google-search-results) (3.0.4)
  Building wheels for collected packages: google-search-results
    Building wheel for google-search-results (setup.py) ... done
      Created wheel for google-search-results: filename-google_search_results-2.4.1-py3-none-any.whl size=25789 sha256=f6b968a83a3b7d15c7b42f5c819c418ff373bf
      Stored in directory: /root/.cache/pip/wheels/82/a3/c5/364155118f298722dff2f79ae4dd7c91e92b433ad36d6f7e0e
Successfully built google-search-results
Installing collected packages: google-search-results
Successfully installed google-search-results-2.4.1
```

Figure 2: Library installation 2



```
image_results = []

for query in ["Headboards & Footboards"]:
    params = {
        "engine": "google",           # search engine. Google, Bing, Yahoo, Naver, Baidu...
        "q": query,                  # search query
        "tbm": "isch",                # image results
        "num": "100",                 # number of images per page
        "ijn": 0,                     # page number: 0 -> first page, 1 -> second...
        "api_key":("36363613acf21aeaae1fc471178bb7af0d63e3a1b4c4e9034d0bc57673cab4e")  # your serpapi api key
    }

    search = GoogleSearch(params)      # where data extraction happens

    images_is_present = True
    while images_is_present:
        results = search.get_dict()    # JSON -> Python dictionary

        # checks for "Google hasn't returned any results for this query."
        if "error" not in results:
            for image in results["images_results"]:
```

Figure 3: Python Code to import the images



1
Figure 4: Image 1



Figure 5: Image 2



Figure 6: Image 3



Figure 7: Image 4



Figure 8: Image 5



Figure 9: Image 6



Figure 10: Image 7



Figure 11: Image 8



Figure 12: Image 9



Figure 13: Image 10