```
1 # Imports
2 !pip install -q sentence-transformers PyYAML chromadb
3 from sentence_transformers import SentenceTransformer, util
4 import yaml
    import os
    import json
    import chromadb
    from chromadb.config import Settings
9
    import pandas as pd
10
11
    # Load a small test dataset (sample queries and rules)
    sample_docs = [
12
13
        {
             "id": "doc1",
14
15
             "type": "yaml rule",
             "content": "alias: Sunset Lights Off\ntrigger:\n - platform: sun\n
16
             event: sunset\naction:\n - service: light.turn_off\n
             light.living_room"
17
        },
18
             "id": "doc2",
19
             "type": "faq",
20
21
             "content": "If your lights do not turn off at sunset, verify that your
             location and time zone are configured correctly in Home Assistant
             settings."
22
    ]
23
     sample_queries = [
25
         "Why won't my living room lights turn off when the sun sets?",
26
27
         "My sunset automation isn't triggering—what should I check?"
28
    ]
29
30
    # Load sentence transformer model
    model = SentenceTransformer('paraphrase-MiniLM-L6-v2')
31
32
33
    # Embed documents
    doc_embeddings = model.encode([d["content"] for d in sample_docs],
     convert_to_tensor=True)
35
36
    # Simple query interface
37
    def retrieve response(query):
         query_embedding = model.encode(query, convert_to_tensor=True)
39
         scores = util.cos_sim(query_embedding, doc_embeddings)[0]
40
        best idx = scores.argmax().item()
41
        return sample_docs[best_idx]["content"]
42
43
    # Try it out
    for query in sample_queries:
44
         print(f"\nUSER: {query}")
45
         print("ASSISTANT:", retrieve_response(query))
46
47
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- 67.3/67.3 kB <mark>5.1 MB/s</mark> eta 0:00:00
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
                                              - 19.3/19.3 MB <mark>91.1 MB/s</mark> eta 0:00:00
                                              - 284.2/284.2 kB 27.8 MB/s eta 0:00:00
                                              · 1.9/1.9 MB 83.5 MB/s eta 0:00:00
                                              - 101.6/101.6 kB 9.8 MB/s eta 0:00:00
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                                               65.8/65.8 kB 6.1 MB/s eta 0:00:00
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                                              - 71.2/71.2 kB 6.8 MB/s eta 0:00:00
                                              - 363.4/363.4 MB 4.0 MB/s eta 0:00:00
                                              - 13.8/13.8 MB 133.8 MB/s eta 0:00:00
                                              - 24.6/24.6 MB 102.0 MB/s eta 0:00:00
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                                             - 46.0/46.0 kB 4.7 MB/s eta 0:00:00
                                              - 86.8/86.8 kB 8.6 MB/s eta 0:00:00
  Building wheel for pypika (pyproject.toml) ... done
/usr/local/lib/python3.11/dist-packages/huggingface_hub/utils/_auth.py:94: UserWarning:
The secret `HF_TOKEN` does not exist in your Colab secrets.
To authenticate with the Hugging Face Hub, create a token in your settings tab (https://huggingface.co/settings/tokens), set it as se
You will be able to reuse this secret in all of your notebooks.
Please note that authentication is recommended but still optional to access public models or datasets.
  warnings.warn(
modules.json: 100%
                                                             229/229 [00:00<00:00, 22.4kB/s]
config_sentence_transformers.json: 100%
                                                                               122/122 [00:00<00:00, 14.5kB/s]
README.md:
                3.51k/? [00:00<00:00, 348kB/s]
sentence_bert_config.json: 100%
                                                                       53.0/53.0 [00:00<00:00, 6.17kB/s]
config.json: 100%
                                                           629/629 [00:00<00:00, 45.3kB/s]
                                                                 90.9M/90.9M [00:01<00:00, 96.3MB/s]
model.safetensors: 100%
tokenizer_config.json: 100%
                                                                   314/314 [00:00<00:00, 20.3kB/s]
              232k/? [00:00<00:00, 10.6MB/s]
vocab.txt:
                 466k/? [00:00<00:00, 30.2MB/s]
tokenizer.ison:
                                                                      112/112 [00:00<00:00, 10.4kB/s]
special_tokens_map.json: 100%
config.json: 100%
                                                           190/190 [00:00<00:00, 16.3kB/s]
USER: Why won't my living room lights turn off when the sun sets?
ASSISTANT: alias: Sunset Lights Off
trigger:
  - platform: sun
    event: sunset
  - service: light.turn off
    entity_id: light.living_room
USER: My sunset automation isn't triggering—what should I check?
ASSISTANT: If your lights do not turn off at sunset, verify that your location and time zone are configured correctly in Home Assista 🖝
```