```
8/12/24, 1:09 AM
                                                                                                    english to hindi translation ipynb - Colab
       !pip install streamlit
       !pip install deep_translator
              Requirement already satisfied: streamlit in /usr/local/lib/python3.10/dist-packages (1.37.1)
              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) (5.4.0)
              Requirement already satisfied: click<9,>=7.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (8.1.7)
              Requirement already satisfied: numpy<3,>=1.20 in /usr/local/lib/python3.10/dist-packages (from streamlit) (1.26.4)
              Requirement already satisfied: packaging<25,>=20 in /usr/local/lib/python3.10/dist-packages (from streamlit) (24.1)
              Requirement already satisfied: pandas<3,>=1.3.0 in /usr/local/lib/python3.10/dist-packages (from streamlit) (2.1.4)
              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<6,>=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/python 3.10/dist-packages (from streamlit) (2.32.3)
              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) (8.5.0)
              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) (4.12.2)
              Requirement already satisfied: gitpython!=3.1.19,<4,>=3.0.7 in /usr/local/lib/python3.10/dist-packages (from streamlit) (3.1.43)
              Requirement already satisfied: pydeck<1,>=0.8.0b4 in /usr/local/lib/python3.10/dist-packages (from streamlit) (0.9.1)
              Requirement already satisfied: tornado<7,>=6.0.3 in /usr/local/lib/python3.10/dist-packages (from streamlit) (6.3.3)
              Requirement already satisfied: watchdog<5,>=2.1.5 in /usr/local/lib/python3.10/dist-packages (from streamlit) (4.0.2)
              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) (3.1.4)
              Requirement already satisfied: jsonschema>=3.0 in /usr/local/lib/python3.10/dist-packages (from altair<6,>=4.0->streamlit) (4.23.0)
              Requirement already satisfied: toolz in /usr/local/lib/python3.10/dist-packages (from altair<6,>=4.0->streamlit) (0.12.1)
              Requirement already satisfied: gitdb<5,>=4.0.1 in /usr/local/lib/python3.10/dist-packages (from gitpython!=3.1.19,<4,>=3.0.7->stream
              Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.10/dist-packages (from pandas<3,>=1.3.0->streamlit)
              Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-packages (from pandas<3,>=1.3.0->streamlit) (2024.1)
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              Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->streamli
              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
              Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->streamlit) (20
              Requirement already satisfied: markdown-it-py>=2.2.0 in /usr/local/lib/python3.10/dist-packages (from rich<14,>=10.14.0->streamlit)
              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
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              Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.10/dist-packages (from jinja2->altair<6,>=4.0->streamlit)
              Requirement already satisfied: attrs>=22.2.0 in /usr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->stready satisfied: attra-ysr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->stready satisfied: attra-ysr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->stready satisfied: attra-ysr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->stready satisfied: attra-ysr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=4.0->altair<6,>=
              Requirement already satisfied: jsonschema-specifications>=2023.03.6 in /usr/local/lib/python3.10/dist-packages (from jsonschema>=3.6
              Requirement already satisfied: referencing>=0.28.4 in /usr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->altair<6,>=4.0
              Requirement already satisfied: rpds-py>=0.7.1 in /usr/local/lib/python3.10/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->stre
              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
              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->s
              Collecting deep translator
                 Downloading deep_translator-1.11.4-py3-none-any.whl.metadata (30 kB)
              Requirement already satisfied: beautifulsoup4<5.0.0,>=4.9.1 in /usr/local/lib/python3.10/dist-packages (from deep_translator) (4.12
              Requirement already satisfied: requests<3.0.0,>=2.23.0 in /usr/local/lib/python3.10/dist-packages (from deep_translator) (2.32.3)
              Requirement already satisfied: soupsieve>1.2 in /usr/local/lib/python3.10/dist-packages (from beautifulsoup4<5.0.0,>=4.9.1->deep_transpackages (from beautifulsoup4<5.0.0,>=4.9.
              Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests<3.0.0,>=2.23.0->de
              Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests<3.0.0,>=2.23.0->deep_translate
              Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests<3.0.0,>=2.23.0->deep transfer
              Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests<3.0.0,>=2.23.0->deep_transfer
              Downloading deep_translator-1.11.4-py3-none-any.whl (42 kB)
                                                                                 - 42.3/42.3 kB <mark>3.7 MB/s</mark> eta 0:00:00
              Installing collected packages: deep_translator
              Successfully installed deep_translator-1.11.4
      import streamlit as st
      from deep_translator import GoogleTranslator
      import datetime
      def translate_word(word):
            # Get current time in IST
            now_utc = datetime.datetime.utcnow()
            now_ist = now_utc + datetime.timedelta(hours=5, minutes=30)
            # Check if word starts with a vowel
            if word[0].lower() in 'aeiou':
                   if now_ist.hour == 21 and now_ist.minute < 60:</pre>
                         return "Error: Words starting with vowels cannot be translated between 9 PM and 10 PM IST"
```

```
# Streamlit app UI
```

return translation except Exception as e:

return f"Error: {str(e)}"

Translate the word using Google Translator

translation = GoogleTranslator(source='en', target='hi').translate(word)

```
st.title('English to Hindi Translator')
word = st.text_input('Enter a word:')
→ 2024-08-11 19:38:08.601
       Warning: to view this Streamlit app on a browser, run it with the following
          streamlit run /usr/local/lib/python3.10/dist-packages/colab_kernel_launcher.py [ARGUMENTS]
     2024-08-11 19:38:08.611 Session state does not function when running a script without `streamlit run`
if st.button('Translate'):
    translation = translate_word(word)
    st.write(f"Translation: {translation}")
train_data = [
    n_uata = [
{"english": "hello", "hindi": "नमस्ते"},
{"english": "world", "hindi": "दुनिया"},
{"english": "apple", "hindi": "सेब"},
{"english": "book", "hindi": "किताब"},
    {"english": "computer", "hindi": "कंप्यूटर"}
]
def translate_and_evaluate(train_data):
    correct = 0
    total = len(train_data)
    for item in train_data:
         translated_word = translate_word(item["english"])
         if translated_word == item["hindi"]:
             correct += 1
    accuracy = (correct / total) * 100
    return accuracy
# Calculate accuracy
accuracy = translate_and_evaluate(train_data)
print(f"Accuracy: {accuracy:.2f}%")
→ Accuracy: 100.00%
Start coding or generate with AI.
```