

Question:

Replace the input data and code in Machine Translation example of CSCE 5200 course Chapter 5 (Part 2). For this purpose, use your own original names to mark variables, size and meanings of input data in the code. Execute the code in any programming language. Describe the problem statement, input data, used methods, code and results obtained. Upload the file consisting of the code and related report to the UNT Canvas environment.

Description of methods and example: The methods and code description and related simulation results are presented in the Chapter 5 (Part 2) of CSCE 5200 course.

```
In [1]: pip install translate

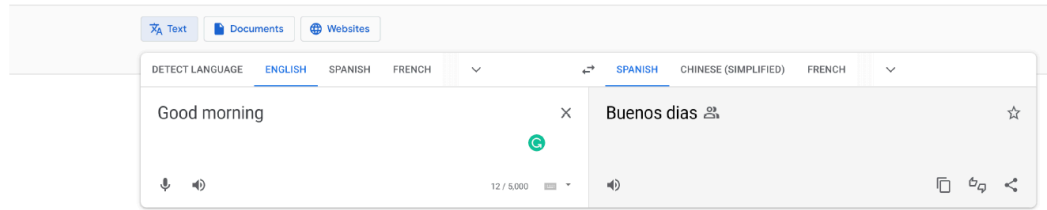
Requirement already satisfied: translate in /Users/roja/opt/anaconda3/lib/python3.9/site-packages (3.6.1)
Requirement already satisfied: lxml in /Users/roja/opt/anaconda3/lib/python3.9/site-packages (from translate) (4.6.3)
Requirement already satisfied: libretranslatepy==2.1.1 in /Users/roja/opt/anaconda3/lib/python3.9/site-packages (from translate) (2.1.1)
Requirement already satisfied: requests in /Users/roja/opt/anaconda3/lib/python3.9/site-packages (from translate) (2.26.0)
Requirement already satisfied: click in /Users/roja/opt/anaconda3/lib/python3.9/site-packages (from translate) (8.0.3)
Requirement already satisfied: idna<4,>=2.5 in /Users/roja/opt/anaconda3/lib/python3.9/site-packages (from requests->translate) (3.2)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in /Users/roja/opt/anaconda3/lib/python3.9/site-packages (from requests->translate) (1.26.7)
Requirement already satisfied: certifi>=2017.4.17 in /Users/roja/opt/anaconda3/lib/python3.9/site-packages (from requests->translate) (2021.10.8)
Requirement already satisfied: charset-normalizer==2.0.0 in /Users/roja/opt/anaconda3/lib/python3.9/site-packages (from requests->translate) (2.0.4)
WARNING: You are using pip version 21.2.3; however, version 22.3 is available.
You should consider upgrading via the '/Users/roja/opt/anaconda3/bin/python -m pip install --upgrade pip' command.
Note: you may need to restart the kernel to use updated packages.
```

```
In [31]: from translate import Translator

spanishtrans = Translator(from_lang="English", to_lang="Spanish")
text = spanishtrans.translate("Good Morning")
print(text)
```

Buenos días

Google Translate

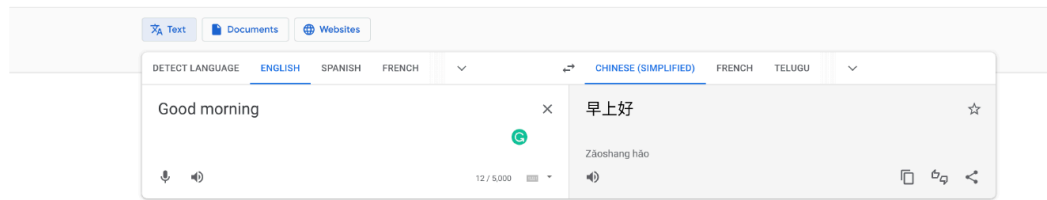


```
In [32]: from translate import Translator

chinesetrans = Translator(from_lang="English", to_lang="Chinese")
text = chinesetrans.translate("Good Morning")
print(text)
```

早上好

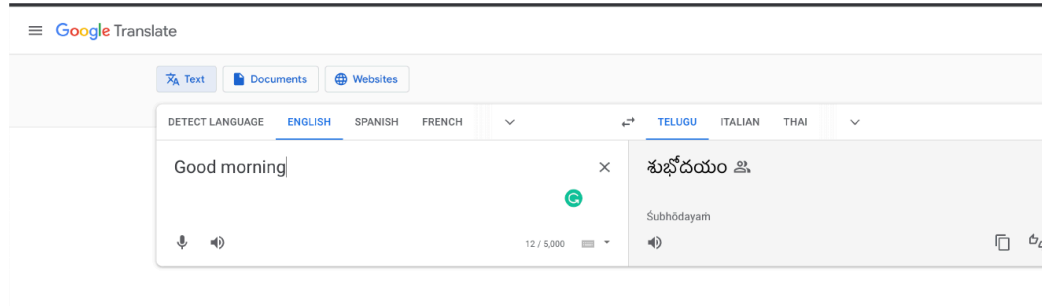
Google Translate



```
In [33]: from translate import Translator

telugutrans = Translator(from_lang="English", to_lang="Telugu")
text = telugutrans.translate("Good Morning")
print(text)
```

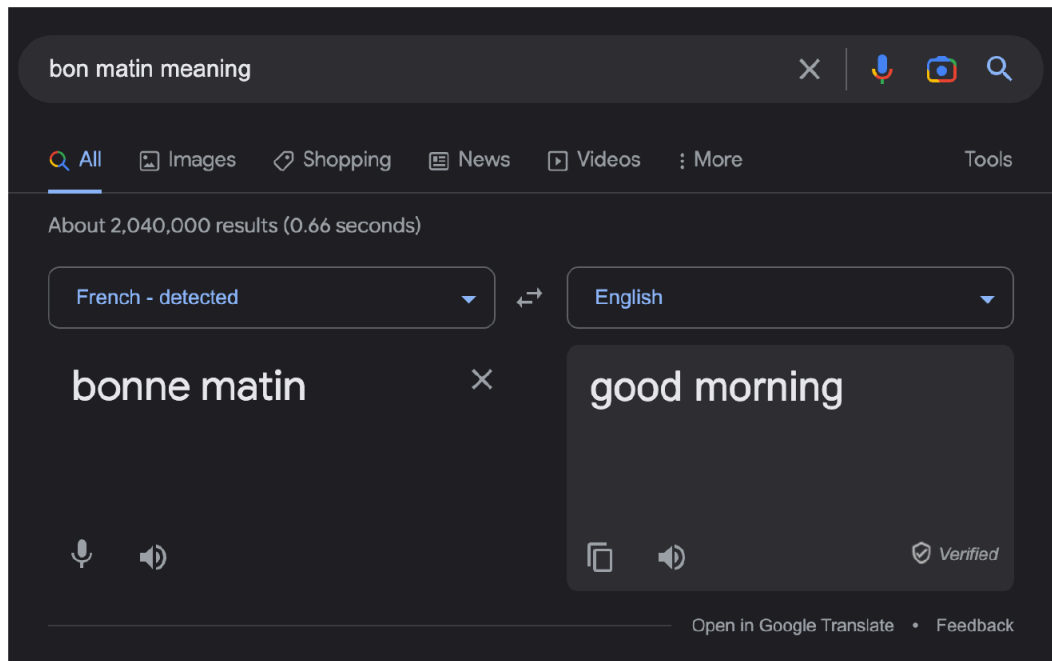
శుభోదయం

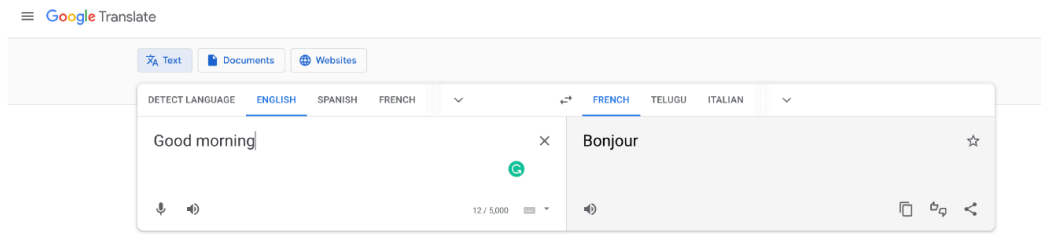


```
In [2]: from translate import Translator

frenchtrans = Translator(from_lang="English", to_lang="French")
translation = frenchtrans.translate("Good Morning")
print(translation)
```

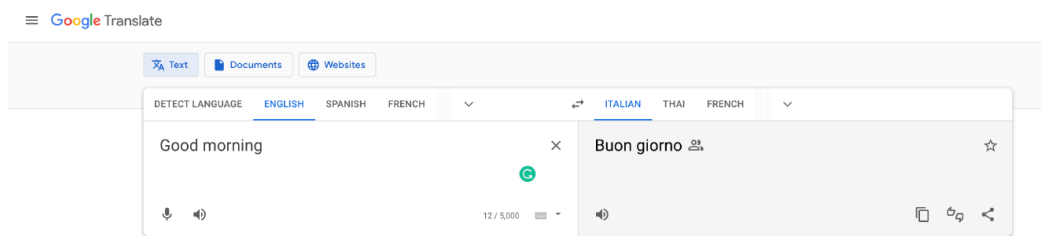
Bon Matin





```
In [35]: from translate import Translator  
  
italiantrans = Translator(from_lang="English", to_lang="Italian")  
text = italiantrans.translate("Good Morning")  
print(text)
```

Buongiorno



Report:

Problem statement: In any programming language translate the text from one language to another.

Input data: Languages and the phrase you want to translate

Methods: Using the python module "Translator" and installing the requirements before the code run.

Code: It is same as above.

Results: Got a translated text "from specified language" to "to specified language". Also, included google translated text as part of verification.

Note that French language has two different text when you translate. Both are correct.

Background: Machine translation is just text that has been translated from one language into another.

There are three machine translation applications:

1. Rough translation
2. Pre-edited translation
3. Restricted-source translation

Translation is challenging because, in the completely general situation, it requires a thorough comprehension of the written language.

An interlingua is a representation language that creates all the distinctions required for a collection of languages.

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