

Eli — EIWL Sections 35, 36

```
In[151]:= (*35.1*) Interpreter["Location"] ["eiffel tower"]
```

```
Out[151]= GeoPosition[{48.8583, 2.29444}]
```

```
In[152]:= (*35.2*) Interpreter["University"] ["U of T"]
```

```
Out[152]= University of Toronto
```

```
In[153]:= (*35.3*) Interpreter["Chemical"] [{"C2H4", "C2H6", "C3H8"}]
```

```
Out[153]= {ethylene, ethane, propane}
```


```
In[154]:= (*35.4*) Interpreter["Date"] ["20140108"]
```


```
Out[154]= Wed 8 Jan 2014
```


```
In[155]:= (*35.5*) Interpreter["University"] [  
  Table[StringJoin["U of ", Capitalize[FromLetterNumber[x]]], {x, 26}]]
```

Out[155]=


```


{Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ], University of Birjand ,


University of California-Berkeley , Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],


The University of Edinburgh , Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],

University of Georgia , University of Houston , University of Illinois at Urbana-Champaign ,


Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],

Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ], University of Lethbridge ,


University of Michigan-Ann Arbor , Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],


Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],


University of Phoenix-Online Campus ,


Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],


University of Regina , University of Saskatchewan , University of Toronto ,


Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],

Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],

Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],

Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],

Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ],


Failure [ +  Message: No university interpretation found. Try again.
Tag: InterpretationFailure ] }


```


In[156]:=


```
(*35.6*) Interpreter["Movie"] [
  CommonName [ EntityList [ United States state capitals CITIES ... ✓ ] ] ]
```


Out[156]=


```
{ Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],


Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],


Phoenix, Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],


Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],


Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],


Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],


Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],


Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],


Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],



Honolulu, Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],



Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],



Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],



Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],



Topeka, Failure [ +  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure ],
```



Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,



Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,



Annapolis , Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,



Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,



Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,



Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,



Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,



Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,



Lincoln , Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,



Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,


Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,


Santa Fe , Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,


Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] , **Expedition: Bismarck** ,


Columbus , Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,


Failure [  Message: No movie interpretation found. Try again.
Tag: InterpretationFailure] ,


Failure [+  Message: No movie interpretation found. Try again. Tag: InterpretationFailure],


Providence, Failure [+  Message: No movie interpretation found. Try again. Tag: InterpretationFailure],


Failure [+  Message: No movie interpretation found. Try again. Tag: InterpretationFailure],

Nashville, Failure [+  Message: No movie interpretation found. Try again. Tag: InterpretationFailure],

Failure [+  Message: No movie interpretation found. Try again. Tag: InterpretationFailure],

Failure [+  Message: No movie interpretation found. Try again. Tag: InterpretationFailure],

Failure [+  Message: No movie interpretation found. Try again. Tag: InterpretationFailure], Olympia,

Failure [+  Message: No movie interpretation found. Try again. Tag: InterpretationFailure], Madison, Cheyenne }

In[157]:=

```
(*35.7*) Interpreter["City"] [StringJoin[#] & /@ Permutations[{"a", "i", "l", "m"}]]
```

Out[157]=

```

{Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] ,

Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] ,

Alim , Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] ,

Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] , Aml ,

Balm , Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] ,

Ilam , Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] ,

Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] ,

Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] ,

Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] , Lami ,

Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] , Lima ,

Lamai , Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] ,

Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] , Mali ,

Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] , Milah ,

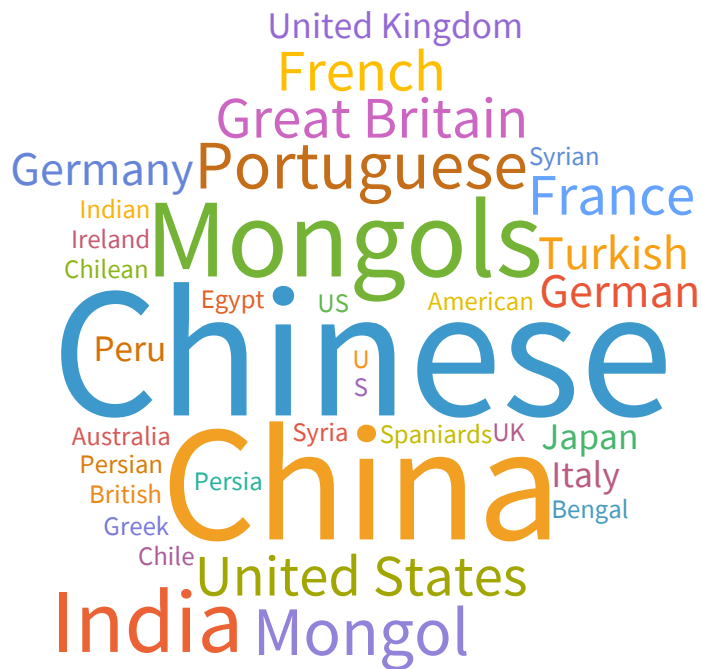
Mali , Failure [ + ! Message: No city interpretation found. Try again.
Tag: InterpretationFailure ] }

```

In[158]:=

```
(*35.8*) WordCloud[TextCases[WikipediaData["gunpowder"], "Country"]]
```

Out[158]=



In[159]:=

```
(*35.9*) TextCases["She sells sea shells by the sea shore", "Noun"]
```

Out[159]=

```
{sea, shells, sea, shore}
```

In[160]:=

```
(*35.10*) Length[#] & /@  
Values[TextCases[StringJoin[Characters[WikipediaData["Computers"]][[1 ;; 1000]],  
{"Noun", "Verb", "Adjective"}]]
```

Out[160]=

```
{54, 23, 20}
```

In[161]:=

```
(*35.11*) TextStructure[TextSentences[WikipediaData["computers"]][[1]]
```

Out[161]=

<u>A</u>	<u>computer</u>	<u>is</u>	<u>a</u>	<u>machine</u>	<u>that</u>	<u>can</u>	<u>be</u>	<u>programmed</u>	<u>to</u>	<u>automate</u>
Determiner	Noun	Verb	Determiner	Noun	Wh-Determiner	Verb	Verb	Verb	Preposition	Adverb
Noun Phrase			Noun Phrase		Wh-Noun Phrase					

In[162]:=

```
(*35.12*) Keys[Reverse[Sort[Counts[
  TextCases[ExampleData[{"Text", "AliceInWonderland"}], "Noun"]]]][[1 ;; 10]]
```

Out[162]=

```
{Rabbit, door, voice, time, Mouse, way, moment, thing, head, garden}
```

In[163]:=

```
(*35.13*) words := TextWords[TextSentences[WikipediaData["language"]][[1]]];
words
```

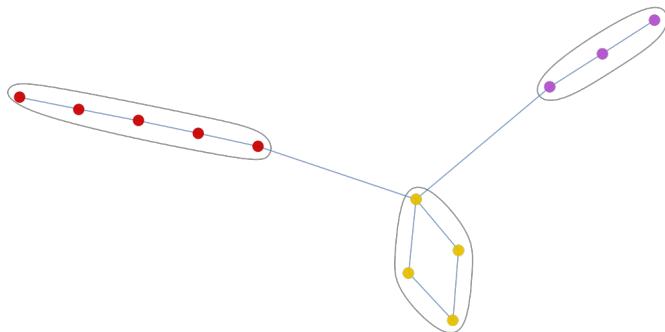
Out[164]=

```
{Language, is, a, structured, system, of,
  communication, that, consists, of, grammar, and, vocabulary}
```

In[165]:=

```
CommunityGraphPlot[words[[#]] → words[[# + 1]] & /@ Range[Length[words] - 1]]
```

Out[165]=




```

In[166]:=
(*35.14*) Length[#] & /@ Values[TextCases[
  StringJoin[Riffle[WordList[]][1 ;; 50], Table[" ", Length[WordList[]][1 ;; 50]]]],
  {"Noun", "Verb", "Adjective", "Adverb"}]]
(*My computer hates the whole wordlist*)

Out[166]=
{29, 9, 8, 2}

In[167]:=
(*35.15*) Flatten[WordTranslation[IntegerName[Range[9] + 1], "French"]]

Out[167]=
{deux, trois, quatre, cinq, six, sept, huit, neuf, dix}

In[168]:=
(*36.1*) CloudPublish[Style[RandomInteger[1000], FontSize → 100]]

Out[168]=
CloudObject[https://www.wolframcloud.com/obj/03b6bac7-ecbe-464e-8358-b603c431e055]

In[169]:=
(*36.2*) CloudPublish[FormFunction[{"x" → "Number"}, #x^#x &]]

Out[169]=
CloudObject[https://www.wolframcloud.com/obj/ca260cc3-3f4d-42a6-9f9b-2701647210b1]

In[170]:=
(*36.3*) CloudPublish[FormFunction[{"x" → "Number", "y" → "Number"}, #x^#y &]]

Out[170]=
CloudObject[https://www.wolframcloud.com/obj/0047c168-4a9e-4794-b09e-700bdd0d57f8]

In[171]:=
(*36.4*) CloudPublish[
  FormFunction[{"page" → "String"}, WordCloud[WikipediaData[#page]] &]]

Out[171]=
CloudObject[https://www.wolframcloud.com/obj/04f9f46f-26c0-4d5e-9f65-0b1423bbdcc2]

In[172]:=
(*36.5*) CloudPublish[
  FormFunction[{"string" → "String"}, Style[StringReverse[#string], 50] &]]

Out[172]=
CloudObject[https://www.wolframcloud.com/obj/80882c6c-d67e-4245-acf5-76ffce4b8594]

In[173]:=
(*36.6*) CloudPublish[FormFunction[{"n" → "Integer"},
  Graphics[Style[RegularPolygon[#n], RandomColor[]]] &]]

Out[173]=
CloudObject[https://www.wolframcloud.com/obj/a3537411-5ad6-4412-b3c8-97409efd1567]

In[174]:=
(*36.7*)

```

In[175]:=

```
CloudPublish[FormFunction[{"location" → "String", "n" → "Integer"},  
  GeoNearest["Volcano", GeoPosition[Interpreter["Location"] [#location]] &, #n &]]]
```

 **GeoNearest:** GeoPosition[Interpreter[Location][#location]] & is not a valid location specification.

Out[175]=

```
CloudObject[https://www.wolframcloud.com/obj/aa01551a-52a8-4dd8-9e19-d8cbd818ea17]
```