# Hexi-PS14-2025 - 03 - 25

#### Exercises from EIWL3 Section 35

```
In[1]:= Interpreter["Location"]["Eiffel Tower"]
Out[1]= GeoPosition[{48.8583, 2.29444}]
      Interpreter["University"]["U of T"]
      University of Toronto
Out[2]=
     Interpreter["Chemical"][{"C2H4", "C2H6", "C3H8"}]
       ethylene, ethane, propane
Out[3]=
     Interpreter["Date"]["20140108"]
Out[4]=
      Wed 8 Jan 2014
In[5]:= Select[Table[Interpreter["University"]["U of " <> X],
        {X, CharacterRange["A", "Z"]}], Head[#] =!= Failure &]
       University of Birjand , University of California-Berkeley , The University of Edinburgh ,
Out[5]=
        University of Georgia, University of Houston, University of Illinois at Urbana-Champaign,
        University of Lethbridge , (University of Michigan-Ann Arbor), (University of Phoenix-Online Campus),
        University of Regina , University of Saskatchewan , University of Toronto
In[6]:= Select Interpreter["Movie"] /@ CommonName /@
                                                              capital city , Head [#] = ! = Failure &
          all US states with District of Columbia ADMINISTRATIVE DIVISIONS
        Phoenix, Honolulu, Topeka, Annapolis, Lincoln, Santa Fe, Expedition: Bismarck,
Out[6]=
        Columbus, Providence, Nashville, Olympia, Madison, Cheyenne
In[7]:= Select[Interpreter["City"][StringJoin /@ Permutations[{"a", "i", "l", "m"}]],
       Head[#] =!= Failure &]
       Alim, (Amli), (Balm), (Ilam), (Lami), (Lima), (Lamai), (Mali), (Milah), (Mali)
```

```
In[8]:= WordCloud[TextCases[WikipediaData["gunpowder"], "Country"]]
                       United Kingdom
     Germany
Out[8]=
                                           Japan
                         Syria SpaniardsUK
         Australia
          Persian
                                            Italy
           British
            Greek
in[9]:= TextCases["She sells seashells by the sea shore", "Noun"]
```

```
Out[9]= {seashells, sea, shore}
In[10]:= Length /@ Values [TextCases [
          StringTake[WikipediaData["computers"], 1000], {"Noun", "Verb", "Adjective"}]]
Out[10]=
      {54, 23, 20}
```

## In[11]:= TextStructure[Take[TextSentences[WikipediaData["computers"]], 1]]

Out[11]= computer is machine that be programmed to auto Verb Determiner Wh-Determiner Determiner Noun Noun Verb Verb Verb Preposition Noun Phrase Noun Phrase Wh-Noun Phrase Ad computer is а machine that can be programmed to auto Determiner Verb Determiner Wh-Determiner Verb Preposition Noun Noun Verb Verb Wh-Noun Phrase Noun Phrase Noun Phrase Ad

#### In[12]:= Keys[TakeLargest[

Counts[TextCases[ExampleData[{"Text", "AliceInWonderland"}], "Noun"]], 10]]

Out[12]=

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

Out[13]=

```
In[13]:= CommunityGraphPlot[First[
```

TextStructure[TextSentences[WikipediaData["language"]], "DependencyGraphs"]]]

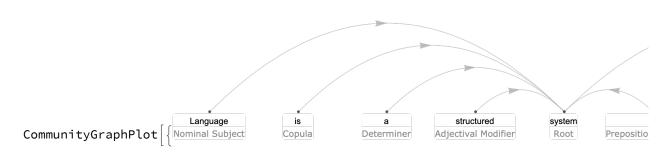
Hmm. Yours is erroring. Other people in the class mostly did something like this:

CommunityGraphPlot[First[TextStructure[
TextSentences[WikipediaData["language"]] [1],
"ConstituentGraphs"]]]

I had a different answer that isn't right, but I actually like better.

••• CommunityGraphPlot: A graph object is expected at position 1 in CommunityGraphPlot \[ \left\{ \frac{Nominal Subject}{Nominal Subject}} \]

Language is copul



## Exercises from EIWL3 Section 36

In[16]:= CloudPublish[Delayed[Style[RandomInteger[1000], 1000]]]
Out[16]:= CloudObject[https://www.wolframcloud.com/obj/896bbe64-1cf8-4bf8-b9c2-6899c78d9345]
In[17]:= CloudPublish[FormFunction[{"x" → "Number"}, #x^#x &]]
Out[17]:= CloudObject[https://www.wolframcloud.com/obj/5118b8c8-80b0-49f9-838e-ab81a2a3ae27]

```
In[18]:= CloudPublish[FormFunction[{"x" → "Number", "y" → "Number"}, #x^#y &]]
Out[18]=
      CloudObject[https://www.wolframcloud.com/obj/aff9bcbc-4218-4fe8-9f6e-c5ab1b89dfc8]
In[19]:= CloudPublish[FormFunction[{"topic" → "String"}, WordCloud[WikipediaData[#topic]] &]]
Out[19]=
      CloudObject[https://www.wolframcloud.com/obj/f312dff2-f31c-484e-a386-7234857e404d]
In[20]:= CloudPublish[
       FormFunction[{"String" → "String"}, Style[StringReverse[#String], 50] &]]
Out[20]=
      CloudObject[https://www.wolframcloud.com/obj/e6bfcd0e-8b2c-4c8d-9184-1a9ffa8fd2bc]
In[21]:= CloudPublish[
       FormPage[{"n" → "Integer"}, Graphics[{RandomColor[], RegularPolygon[#n]}] &]]
Out[21]=
      CloudObject[https://www.wolframcloud.com/obj/43aae6fb-de4b-46ec-895b-2402988e4341]
In[22]:= CloudPublish[FormPage[{"location" → "Location", "n" → "Number"},
        GeoListPlot[Nearest[EntityList["Volcano"], #location, #n]] &]]
Out[22]=
      CloudObject https://www.wolframcloud.com/obj/cd3c2ab6-979e-4646-a168-0229756ea1f3
```