Sentence Background Colors => BLEU Ranges

    1 - 1
    0.7506 - 1
    0 - 0.7071
    0 - 0
    0 - 0

N-gram Colors => Number of Matching Reference Translations

    1

PWER errors are marked in red on output sentence displays.

Color by system # <u>0</u> (default)

Sort by <u>BLEU score</u> | <u>corpus order</u> (default)

Sentence 0)   BLEU: 0 (0.75/0.5714/0.3333/0)

Source	How many states border the largest state
Ref 0	count(state(next_to_2(largest(state(all
Output 0	count(state(next_to_2(**stateid(loc_2(** largest(state(all
N-grams	count(state(next_to_2(stateid(loc_2(largest(state(all count(state(next_to_2(largest(state(all count(state(largest(state(count(state(next_to_2(largest(state(all state(next_to_2(state(all

---

Sentence 1)   BLEU: 0 (0.3333/0/0/0)

Source	Where is Baton Rouge
Ref 0	loc_1(cityid('baton rouge', _
Output 0	loc_1(**Baton Rouge**
N-grams	loc_1(Baton Rouge loc_1(

Sentence 2)   BLEU: 0 (0.75/0.3333/0/0)

Source	How many people are there in Iowa
Ref 0	population_1(stateid('iowa'
Output 0	population_1(**cityid(** stateid('iowa'
N-grams	population_1(cityid(stateid('iowa' population_1(stateid('iowa' stateid('iowa'

Sentence 3)   BLEU: 0 (0.8/0.5/0.3333/0)

Source	What state is Miami in
Ref 0	state(loc_1(cityid('miami', _
Output 0	state(loc_1(cityid(**Miami** _

N-grams	state(loc_1(cityid(Miami _
	state(loc_1(cityid(_
	state(loc_1(
	state(loc_1(cityid(
	loc_1(cityid(

Sentence 4)   BLEU: 1 (1/1/1/1)

Source	How many citizens in Boulder
Ref 0	population_1(cityid('boulder', _
Output 0	population_1(cityid('boulder', _
N-grams	population_1(cityid('boulder', _
	population_1(cityid('boulder', _
	population_1(cityid('boulder', _
	population_1(cityid('boulder',
	population_1(cityid('boulder', _
	cityid('boulder',
	cityid('boulder', _

Sentence 5)   BLEU: 0 (0.4/0.25/0/0)

Source	What rivers run through Austin Texas
Ref 0	river(traverse_2(cityid('austin', 'tx'
Output 0	river(traverse_2(**stateid(Austin 'texas'**
N-grams	river(traverse_2(stateid(Austin 'texas'
	river(traverse_2(
	river(traverse_2(

Sentence 6)   BLEU: 0 (1/1/1/0)

Source	What is the area of Idaho
Ref 0	area_1(stateid('idaho'
Output 0	area_1(stateid('idaho'
N-grams	area_1(stateid('idaho'
	area_1(stateid('idaho'
	area_1(stateid(
	area_1(stateid('idaho'
	stateid('idaho'

Sentence 7)   BLEU: 1 (1/1/1/1)

Source	What are the major cities in Rhode Island
Ref 0	major(city(loc_2(stateid('rhode island'
Output 0	major(city(loc_2(stateid('rhode island'
N-grams	major(city(loc_2(stateid('rhode island'

major(city(loc_2(stateid('rhode island'
major(city(loc_2(stateid('rhode island'
major(city(loc_2(stateid('rhode
major(city(loc_2(stateid(
        city(loc_2(stateid('rhode island'
        city(loc_2(stateid(
        city(loc_2(stateid('rhode
            loc_2(stateid('rhode
            loc_2(stateid('rhode island'

Sentence 8)   **BLEU:** 0.8091 (0.8571/0.8333/0.8/0.75)

Source	Which states border states through which the Mississippi traverses
Ref 0	state(next_to_2(state(traverse_1(riverid('mississippi'
Output 0	state(next_to_2(state(traverse_1(riverid('mississippi' **traverses**

N-grams	state(next_to_2(state(traverse_1(riverid('mississippi' traverses
	state(next_to_2(state(traverse_1(riverid('mississippi'
	state(next_to_2(state(traverse_1(riverid('mississippi'
	state(next_to_2(state(traverse_1(riverid(
	state(next_to_2(state(traverse_1(
	        next_to_2(state(traverse_1(riverid('mississippi'
	        next_to_2(state(traverse_1(
	        next_to_2(state(traverse_1(riverid(
	                state(traverse_1(riverid(
	                state(traverse_1(riverid('mississippi'

Sentence 9)   **BLEU:** 1 (1/1/1/1)

Source	What are the populations of the major cities of Texas
Ref 0	population_1(major(city(loc_2(stateid('texas'
Output 0	population_1(major(city(loc_2(stateid('texas'

N-grams	population_1(major(city(loc_2(stateid('texas'
	population_1(major(city(loc_2(stateid('texas'
	population_1(major(city(loc_2(stateid('texas'
	population_1(major(city(loc_2(stateid(
	population_1(major(city(loc_2(
	            major(city(loc_2(stateid('texas'
	            major(city(loc_2(
	            major(city(loc_2(stateid(
	                city(loc_2(stateid(
	                city(loc_2(stateid('texas'

Sentence 10)   **BLEU:** 0 (0.5455/0.2/0.1111/0)

Source	How many rivers do not traverse the state with the capital Albany
Ref 0	count(exclude(river(all , traverse_2(state(loc_1(capital(cityid('albany', _

Output 0	count(river(**do stateid(** , **traverse loc_2(** state(loc_1(capital(**Albany**

N-grams	count(river(do stateid(, traverse loc_2(state(loc_1(capital(Albany
	count(river(, state(loc_1(capital(
	                                        state(loc_1(
	                                        state(loc_1(capital(
	                                            loc_1(capital(

Sentence 11)   BLEU: 1 (1/1/1/1)

Source	What is the highest point in Ohio
Ref 0	highest(place(loc_2(stateid('ohio'
Output 0	highest(place(loc_2(stateid('ohio'

N-grams	highest(place(loc_2(stateid('ohio'
	highest(place(loc_2(stateid('ohio'
	highest(place(loc_2(stateid(
	highest(place(loc_2(stateid('ohio'
	highest(place(loc_2(stateid(
	        place(loc_2(
	        place(loc_2(stateid(
	        place(loc_2(stateid('ohio'
	            loc_2(stateid('ohio'

Sentence 12)   BLEU: 1 (1/1/1/1)

Source	How many rivers run through the states bordering Colorado
Ref 0	count(river(traverse_2(state(next_to_2(stateid('colorado'
Output 0	count(river(traverse_2(state(next_to_2(stateid('colorado'

N-grams	count(river(traverse_2(state(next_to_2(stateid('colorado'
	count(river(traverse_2(state(next_to_2(stateid('colorado'
	count(river(traverse_2(state(next_to_2(stateid(
	count(river(traverse_2(state(next_to_2(stateid('colorado'
	count(river(traverse_2(state(next_to_2(stateid('colorado'
	        river(traverse_2(state(next_to_2(stateid(
	        river(traverse_2(state(
	        river(traverse_2(state(next_to_2(
	            traverse_2(state(next_to_2(
	            traverse_2(state(next_to_2(stateid(
	                state(next_to_2(stateid('colorado'

Sentence 13)   BLEU: 0 (0.6/0.25/0/0)

Source	How many people stay in Utah
Ref 0	population_1(stateid('utah'
Output 0	population_1(**cityid(stay** stateid('utah'
N-grams	population_1(cityid(stay stateid('utah'

population_1(	stateid('utah'
	stateid('utah'

Sentence 14)   BLEU: 0.7598 (0.8333/0.8/0.75/0.6667)

Source	What state has the most cities
Ref 0	most(state(loc_1(city(all
Output 0	**What** most(state(loc_1(city(all
N-grams	What most(state(loc_1(city(all most(state(loc_1(city(all most(state(loc_1(city(most(state(loc_1(city(all most(state(loc_1(city(state(loc_1(state(loc_1(city(state(loc_1(city(all loc_1(city(all

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Sentence 15)   BLEU: 1 (1/1/1/1)

Source	What is the largest city in Alabama
Ref 0	largest(city(loc_2(stateid('alabama'
Output 0	largest(city(loc_2(stateid('alabama'
N-grams	largest(city(loc_2(stateid('alabama' largest(city(loc_2(stateid('alabama' largest(city(loc_2(stateid(largest(city(loc_2(stateid('alabama' largest(city(loc_2(stateid(city(loc_2(city(loc_2(stateid(city(loc_2(stateid('alabama' loc_2(stateid('alabama'

Sentence 16)   BLEU: 0.4889 (0.8571/0.6667/0.4/0.25)

Source	What is the capital of the state with the largest population density
Ref 0	capital(loc_2(largest_one(density_1(state(all
Output 0	capital(loc_2(**stateid(** largest_one(density_1(state(all
N-grams	capital(loc_2(stateid(largest_one(density_1(state(all capital(loc_2(largest_one(density_1(state(all capital(loc_2(largest_one(density_1(state(all largest_one(density_1(state(largest_one(density_1(state(all density_1(state(density_1(state(all

Sentence 17)   BLEU: 0.6435 (0.8571/0.6667/0.6/0.5)

Source	What is the height of the highest point in the USA
Ref 0	elevation_1(highest(place(loc_2(countryid('usa'
Output 0	elevation_1(**stateid(** highest(place(loc_2(countryid('usa'

N-grams	elevation_1(stateid(highest(place(loc_2(countryid('usa'
	elevation_1(highest(place(loc_2(countryid('usa'
	                 highest(place(loc_2(countryid(
	                 highest(place(loc_2(countryid('usa'
	                 highest(place(loc_2(countryid(
	                         place(loc_2(
	                         place(loc_2(countryid(
	                         place(loc_2(countryid('usa'
	                            loc_2(countryid('usa'

Sentence 18)   BLEU: 1 (1/1/1/1)

Source	How long is the longest river in California
Ref 0	len(longest(river(loc_2(stateid('california'
Output 0	len(longest(river(loc_2(stateid('california'

N-grams	len(longest(river(loc_2(stateid('california'
	len(longest(river(loc_2(stateid('california'
	len(longest(river(loc_2(stateid('california'
	len(longest(river(loc_2(stateid(
	len(longest(river(loc_2(
	      longest(river(loc_2(stateid('california'
	      longest(river(loc_2(
	      longest(river(loc_2(stateid(
	             river(loc_2(stateid(
	             river(loc_2(stateid('california'

Sentence 19)   BLEU: 0.6034 (0.9091/0.7/0.5556/0.375)

Source	Which states have points that are higher than the highest point in Texas
Ref 0	state(loc_1(place(higher_2(highest(place(loc_2(stateid('texas'
Output 0	state(loc_1(place(**that** loc_2(higher_2(highest(place(**loc_2(** stateid('texas'

N-grams	state(loc_1(place(that loc_2(higher_2(highest(place(loc_2(stateid('texas'
	state(loc_1(place(loc_2(higher_2(highest(place(loc_2(stateid('texas'
	state(loc_1(higher_2(highest(place(loc_2(stateid(
	state(loc_1(place(higher_2(highest(place(loc_2(stateid('texas'
	       loc_1(place(higher_2(highest(place(loc_2(stateid('texas'
	                                      highest(place(
	                                      highest(place(loc_2(
	                                      highest(place(loc_2(stateid(
	                                          place(loc_2(stateid(
	                                          place(loc_2(stateid('texas'

Sentence 20)   **BLEU:** 0.4064 (0.75/0.5455/0.3/0.2222)

Source	What is the longest river that passes the states that border the state that borders the most states
Ref 0	longest(river(traverse_2(state(next_to_2(most(state(next_to_2(state(all
Output 0	longest(river(**passes** state(next_to_2(**stateid(loc_2(** most(state(next_to_2(state(all

N-grams	longest(river(passes state(next_to_2(stateid(loc_2(most(state(next_to_2(state(all
	longest(river(state(next_to_2(most(state(next_to_2(state(all
	longest(river(state(next_to_2(most(state(next_to_2(state(
	      most(state(next_to_2(state(all
	      most(state(next_to_2(state(
	      state(next_to_2(
	      state(next_to_2(state(
	      state(next_to_2(state(all
	      next_to_2(state(all

Sentence 21)   **BLEU:** 0.8932 (0.9091/0.9/0.8889/0.875)

Source	What are the major cities in the states through which the major river in Virginia runs
Ref 0	major(city(loc_2(state(traverse_1(major(river(loc_2(stateid('virginia'
Output 0	major(city(loc_2(state(traverse_1(major(river(loc_2(stateid('virginia' **runs**

N-grams	major(city(loc_2(state(traverse_1(major(river(loc_2(stateid('virginia' runs
	major(city(loc_2(state(traverse_1(major(river(loc_2(stateid('virginia'
	major(city(loc_2(state(traverse_1(major(river(loc_2(stateid('virginia'
	major(city(loc_2(state(traverse_1(major(river(loc_2(stateid(
	major(city(loc_2(state(traverse_1(major(river(loc_2(stateid('virginia'
	      city(loc_2(state(traverse_1(major(river(loc_2(stateid(
	      city(loc_2(state(traverse_1(major(river(loc_2(
	      city(loc_2(state(traverse_1(major(river(loc_2(
	      loc_2(state(traverse_1(major(river(loc_2(stateid(
	      loc_2(state(traverse_1(major(river(loc_2(stateid('virginia'
	      state(traverse_1(major(river(

Sentence 22)   **BLEU:** 0 (0.6/0.25/0/0)

Source	In which state is Rochester
Ref 0	state(loc_1(cityid('rochester', _
Output 0	state(loc_1(**In is** 'rochester',
N-grams	state(loc_1(In is 'rochester', state(loc_1('rochester', state(loc_1(

Sentence 23)   **BLEU:** 0.7598 (0.8333/0.8/0.75/0.6667)

Source	Name the major lakes in Michigan

Ref 0	major(lake(loc_2(stateid('michigan'
Output 0	**Name** major(lake(loc_2(stateid('michigan'
N-grams	Name major(lake(loc_2(stateid('michigan' major(lake(loc_2(stateid('michigan' major(lake(loc_2(stateid(major(lake(loc_2(stateid('michigan' major(lake(loc_2(stateid(lake(loc_2(lake(loc_2(stateid(lake(loc_2(stateid('michigan' loc_2(stateid('michigan'

Sentence 24)   **BLEU:** 1 (1/1/1/1)

Source	What rivers are in Texas
Ref 0	river(loc_2(stateid('texas'
Output 0	river(loc_2(stateid('texas'
N-grams	river(loc_2(stateid('texas' river(loc_2(stateid('texas' river(loc_2(stateid('texas' river(loc_2(stateid(river(loc_2(stateid('texas' loc_2(stateid(loc_2(stateid('texas'

Sentence 25)   **BLEU:** 1 (1/1/1/1)

Source	What is the largest state that borders California
Ref 0	largest(state(next_to_2(stateid('california'
Output 0	largest(state(next_to_2(stateid('california'
N-grams	largest(state(next_to_2(stateid('california' largest(state(next_to_2(stateid('california' largest(state(next_to_2(stateid(largest(state(next_to_2(stateid('california' largest(state(next_to_2(stateid(state(next_to_2(state(next_to_2(stateid(state(next_to_2(stateid('california' next_to_2(stateid('california'

Sentence 26)   **BLEU:** 0 (0.6667/0/0/0)

Source	How many people live in California
Ref 0	population_1(stateid('california'
Output 0	population_1(**cityid(** 'california'

N-grams	population_1(cityid('california'
	population_1('california'

Sentence 27)   BLEU: 0.4111 (0.75/0.5714/0.3333/0.2)

Source	What are the cities in states through which the Mississippi runs
Ref 0	city(loc_2(state(traverse_1(riverid('mississippi'
Output 0	city(loc_2(**stateid(runs** state(traverse_1(riverid('mississippi'

N-grams	city(loc_2(stateid(runs state(traverse_1(riverid('mississippi'
	city(loc_2(state(traverse_1(riverid('mississippi'
	city(loc_2(state(traverse_1(riverid('mississippi'
	                               state(traverse_1(riverid(
	                               state(traverse_1(riverid('mississippi'
	                                      traverse_1(riverid(
	                                      traverse_1(riverid('mississippi'

Sentence 28)   BLEU: 0 (0.6667/0.4/0.25/0)

Source	What is the population of the largest state
Ref 0	population_1(largest(state(all
Output 0	population_1(**stateid(loc_2(** largest(state(all

N-grams	population_1(stateid(loc_2(largest(state(all
	population_1(largest(state(all
	                               largest(state(
	                               largest(state(all
	                                       state(all

Sentence 29)   BLEU: 1 (1/1/1/1)

Source	What is the population of New York
Ref 0	population_1(stateid('new york'
Output 0	population_1(stateid('new york'

N-grams	population_1(stateid('new york'
	population_1(stateid('new york'
	population_1(stateid('new york'
	population_1(stateid('new
	population_1(stateid('new york'
	                stateid('new
	                stateid('new york'

Sentence 30)   BLEU: 0.7598 (0.8333/0.8/0.75/0.6667)

Source	Where is the highest mountain of the United States
Ref 0	highest(mountain(loc_2(countryid('usa'
Output 0	**loc_1(** highest(mountain(loc_2(countryid('usa'

N-grams	loc_1(highest(mountain(loc_2(countryid('usa'
	highest(mountain(loc_2(countryid('usa'
	highest(mountain(loc_2(countryid(
	highest(mountain(loc_2(countryid('usa'
	highest(mountain(loc_2(countryid(
	mountain(loc_2(
	mountain(loc_2(countryid(
	mountain(loc_2(countryid('usa'
	loc_2(countryid('usa'

Sentence 31) **BLEU:** 0 (0.5455/0.3/0.1111/0)

Source	Of the states washed by the Mississippi river which has the lowest point
Ref 0	state(loc_1(lowest(place(loc_2(state(traverse_1(river(riverid('mississippi'
Output 0	**Of** loc_2(state(**washed by** lowest(place(**loc_2(Mississippi** river(**all**
N-grams	Of loc_2(state(washed by lowest(place(loc_2(Mississippi river(all
	loc_2(state(lowest(place(river(
	loc_2(state(lowest(place(
	lowest(place(loc_2(
	place(loc_2(

Sentence 32) **BLEU:** 0 (0.5/0/0/0)

Source	Where is Indianapolis
Ref 0	loc_1(cityid('indianapolis', _
Output 0	loc_1(**Indianapolis**
N-grams	loc_1(Indianapolis
	loc_1(

Sentence 33) **BLEU:** 1 (1/1/1/1)

Source	What is the largest city in Texas
Ref 0	largest(city(loc_2(stateid('texas'
Output 0	largest(city(loc_2(stateid('texas'
N-grams	largest(city(loc_2(stateid('texas'
	largest(city(loc_2(stateid('texas'
	largest(city(loc_2(stateid(
	largest(city(loc_2(stateid('texas'
	largest(city(loc_2(stateid(
	city(loc_2(
	city(loc_2(stateid(
	city(loc_2(stateid('texas'
	loc_2(stateid('texas'

Sentence 34) **BLEU:** 0 (0.8/0.5/0.3333/0)

Source	What is the river that cross over Ohio
Ref 0	river(traverse_2(stateid('ohio'
Output 0	river(traverse_2(stateid(**over** 'ohio'
N-grams	river(traverse_2(stateid(over 'ohio' river(traverse_2(stateid('ohio' river(traverse_2(river(traverse_2(stateid(traverse_2(stateid(

Sentence 35)   BLEU: 0.4172 (0.7273/0.5/0.3333/0.25)

Source	What state contains the highest point of those the Colorado river traverses
Ref 0	state(loc_1(highest(place(loc_2(state(traverse_1(river(riverid('colorado'
Output 0	state(loc_1(highest(place(loc_2(**stateid(those** riverid('colorado' river(**traverse_2(**

N-grams	state(loc_1(highest(place(loc_2(stateid(those riverid('colorado' river(traverse_2(
	state(loc_1(highest(place(loc_2(riverid('colorado' river(
	state(loc_1(highest(place(riverid('colorado'
	state(loc_1(highest(place(loc_2(
	state(loc_1(highest(place(
	          loc_1(highest(
	          loc_1(highest(place(
	          loc_1(highest(place(loc_2(
	                highest(place(loc_2(

Sentence 36)   BLEU: 0.5373 (0.8333/0.6/0.5/0.3333)

Source	What are the populations of states which border Texas
Ref 0	population_1(state(next_to_2(stateid('texas'
Output 0	population_1(**loc_2(** state(next_to_2(stateid('texas'

N-grams	population_1(loc_2(state(next_to_2(stateid('texas'
	population_1(state(next_to_2(stateid('texas'
	                state(next_to_2(stateid('texas'
	                state(next_to_2(stateid(
	                state(next_to_2(stateid('texas'
	                     next_to_2(stateid(
	                     next_to_2(stateid('texas'

Sentence 37)   BLEU: 0 (0.4286/0/0/0)

Source	How big is the city of New York
Ref 0	size(city(cityid('new york', _
Output 0	size(**stateid(** city(**loc_2(stateid(** 'new **york'**
N-grams	size(stateid(city(loc_2(stateid('new york' size(city('new

Sentence 38)   **BLEU:** 0 (0.75/0.3333/0/0)

Source	How many people live in New Mexico
Ref 0	population_1(stateid('new mexico'
Output 0	population_1(**cityid(** 'new mexico'
N-grams	population_1(cityid('new mexico' population_1('new mexico' 'new mexico'

Sentence 39)   **BLEU:** 1 (1/1/1/1)

Source	Which rivers are in Alaska
Ref 0	river(loc_2(stateid('alaska'
Output 0	river(loc_2(stateid('alaska'

N-grams	river(loc_2(stateid('alaska'
	river(loc_2(stateid('alaska'
	river(loc_2(stateid('alaska'
	river(loc_2(stateid(
	river(loc_2(stateid('alaska'
	       loc_2(stateid(
	       loc_2(stateid('alaska'

Sentence 40)   **BLEU:** 1 (1/1/1/1)

Source	How many rivers are there in Idaho
Ref 0	count(river(loc_2(stateid('idaho'
Output 0	count(river(loc_2(stateid('idaho'

N-grams	count(river(loc_2(stateid('idaho'
	count(river(loc_2(stateid('idaho'
	count(river(loc_2(stateid(
	count(river(loc_2(stateid('idaho'
	count(river(loc_2(stateid(
	       river(loc_2(
	       river(loc_2(stateid(
	       river(loc_2(stateid('idaho'
	              loc_2(stateid('idaho'

Sentence 41)   **BLEU:** 0 (0.5/0.2/0/0)

Source	How many rivers are called Colorado
Ref 0	count(river(riverid('colorado'
Output 0	count(river(**loc_2(stateid(called** 'colorado'
N-grams	count(river(loc_2(stateid(called 'colorado' count(river('colorado' count(river(

Sentence 42)   BLEU: 0 (0.7143/0.5/0.2/0)

Source	What is the longest river in the United States
Ref 0	longest(river(loc_2(countryid('usa'
Output 0	longest(river(loc_2(**stateid(the** countryid('usa'
N-grams	longest(river(loc_2(stateid(the countryid('usa' longest(river(loc_2(countryid('usa' longest(river(countryid('usa' longest(river(loc_2(river(loc_2(

Sentence 43)   BLEU: 0 (0.625/0.4286/0.1667/0)

Source	What is the smallest state that the Mississippi river runs through
Ref 0	smallest(state(traverse_1(river(riverid('mississippi'
Output 0	smallest(state(**all that** river(riverid('mississippi' **through**

N-grams	smallest(state(all that river(riverid('mississippi' through
	smallest(state(river(riverid('mississippi'
	smallest(state(river(riverid(
	                          river(riverid('mississippi'
	                                    riverid('mississippi'

Sentence 44)   BLEU: 1 (1/1/1/1)

Source	Which states border Arizona
Ref 0	state(next_to_2(stateid('arizona'
Output 0	state(next_to_2(stateid('arizona'

N-grams	state(next_to_2(stateid('arizona'
	state(next_to_2(stateid('arizona'
	state(next_to_2(stateid('arizona'
	state(next_to_2(stateid(
	state(next_to_2(stateid('arizona'
	        next_to_2(stateid(
	        next_to_2(stateid('arizona'

Sentence 45)   BLEU: 0 (0.4/0/0/0)

Source	Which states do Colorado river flow through
Ref 0	state(traverse_1(river(riverid('colorado'
Output 0	**exclude(** state(**Colorado** river(**traverse_2(**
N-grams	exclude(state(Colorado river(traverse_2(state(river(

Sentence 46)   BLEU: 0 (0.6667/0.5/0/0)

Source	What are the states
Ref 0	state(all
Output 0	**loc_2(** state(all
N-grams	loc_2(state(all 　　　　state(all 　　　　state(all

Sentence 47)   BLEU: 0.6148 (0.7143/0.6667/0.6/0.5)

Source	Which rivers do not run through USA
Ref 0	exclude(river(all , traverse_2(countryid('usa'
Output 0	exclude(river(all , traverse_2(**stateid(USA**
N-grams	exclude(river(all , traverse_2(stateid(USA exclude(river(all , traverse_2(exclude(river(all , exclude(river(all , traverse_2(exclude(river(all , 　　　　river(all 　　　　river(all , 　　　　river(all , traverse_2(　　　　　　all , traverse_2(

Sentence 48)   BLEU: 0.4463 (0.5556/0.5/0.4286/0.3333)

Source	Show me all the major lakes in the US
Ref 0	major(lake(loc_2(countryid('usa'
Output 0	**Show stateid(all the** major(lake(loc_2(countryid('usa'
N-grams	Show stateid(all the major(lake(loc_2(countryid('usa' 　　　　major(lake(loc_2(countryid('usa' 　　　　major(lake(loc_2(countryid(　　　　major(lake(loc_2(countryid('usa' 　　　　major(lake(loc_2(countryid(　　　　　　lake(loc_2(　　　　　　lake(loc_2(countryid(　　　　　　lake(loc_2(countryid('usa' 　　　　　　　loc_2(countryid('usa'

Sentence 49)   BLEU: 0 (0.5/0.4/0.25/0)

Source	Give me the largest state
Ref 0	largest(state(all
Output 0	**Give stateid(loc_2(** largest(state(all
N-grams	Give stateid(loc_2(largest(state(all 　　　　largest(state(all

largest(state(
largest(state(all
state(all

Sentence 50)   **BLEU:** 0 (0.6/0.5/0.3333/0)

Source	What is the highest point in the USA
Ref 0	highest(place(loc_2(countryid('usa'
Output 0	highest(place(loc_2(**stateid(USA**
N-grams	highest(place(loc_2(stateid(USA highest(place(loc_2(highest(place(highest(place(loc_2(place(loc_2(

Sentence 51)   **BLEU:** 0.7598 (0.8333/0.8/0.75/0.6667)

Source	What is the biggest state in the USA
Ref 0	largest(state(loc_2(countryid('usa'
Output 0	**stateid(** largest(state(loc_2(countryid('usa'
N-grams	stateid(largest(state(loc_2(countryid('usa' largest(state(loc_2(countryid('usa' largest(state(loc_2(countryid(largest(state(loc_2(countryid('usa' largest(state(loc_2(countryid(state(loc_2(state(loc_2(countryid(state(loc_2(countryid('usa' loc_2(countryid('usa'

Sentence 52)   **BLEU:** 1 (1/1/1/1)

Source	Which city in California has the largest population
Ref 0	largest_one(population_1(city(loc_2(stateid('california'
Output 0	largest_one(population_1(city(loc_2(stateid('california'
N-grams	largest_one(population_1(city(loc_2(stateid('california' largest_one(population_1(city(loc_2(stateid('california' largest_one(population_1(city(loc_2(stateid('california' largest_one(population_1(city(loc_2(stateid(largest_one(population_1(city(loc_2(population_1(city(loc_2(stateid('california' population_1(city(loc_2(population_1(city(loc_2(stateid(city(loc_2(stateid(city(loc_2(stateid('california'

Sentence 53)   **BLEU:** 0.6687 (1/0.6667/0.6/0.5)

Source	What is the population of the major cities in Wisconsin
Ref 0	population_1(major(city(loc_2(stateid('wisconsin'
Output 0	population_1(stateid(major(city(loc_2(**stateid(** 'wisconsin'
N-grams	population_1(stateid(major(city(loc_2(stateid('wisconsin' population_1(stateid(major(city(loc_2(stateid('wisconsin' major(city(loc_2(stateid('wisconsin' major(city(loc_2(major(city(loc_2(stateid(city(loc_2(city(loc_2(stateid(city(loc_2(stateid('wisconsin' loc_2(stateid('wisconsin'

Sentence 54)   **BLEU:** 0 (0.6667/0.5/0/0)

Source	List the states
Ref 0	state(all
Output 0	**List** state(all
N-grams	List state(all state(all state(all

Sentence 55)   **BLEU:** 0 (1/1/1/0)

Source	What is the largest capital
Ref 0	largest(capital(all
Output 0	largest(capital(all
N-grams	largest(capital(all largest(capital(all largest(capital(largest(capital(all capital(all

Sentence 56)   **BLEU:** 0 (0.3333/0/0/0)

Source	How many people live in Washington
Ref 0	population_1(stateid('washington'
Output 0	population_1(**cityid('washington',**
N-grams	population_1(cityid('washington', population_1(

Sentence 57)   **BLEU:** 0.7598 (0.8333/0.8/0.75/0.6667)

Source	Which is the longest river in USA

Ref 0	longest(river(loc_2(countryid('usa'
Output 0	**Which** longest(river(loc_2(countryid('usa'
N-grams	Which longest(river(loc_2(countryid('usa' longest(river(loc_2(countryid('usa' longest(river(loc_2(countryid(longest(river(loc_2(countryid('usa' longest(river(loc_2(countryid(river(loc_2(river(loc_2(countryid(river(loc_2(countryid('usa' loc_2(countryid('usa'

Sentence 58)   BLEU: 1 (1/1/1/1)

Source	What is the state with the largest area
Ref 0	largest_one(area_1(state(all
Output 0	largest_one(area_1(state(all
N-grams	largest_one(area_1(state(all largest_one(area_1(state(all largest_one(area_1(state(all largest_one(area_1(state(largest_one(area_1(state(all area_1(state(area_1(state(all

Sentence 59)   BLEU: 0 (0.6667/0.4/0.25/0)

Source	What is the area of the smallest state
Ref 0	area_1(smallest(state(all
Output 0	area_1(**stateid(loc_2(** smallest(state(all
N-grams	area_1(stateid(loc_2(smallest(state(all area_1(smallest(state(all smallest(state(smallest(state(all state(all

Sentence 60)   BLEU: 0.8034 (1/0.875/0.7143/0.6667)

Source	How many major cities are in states bordering Nebraska
Ref 0	count(major(city(loc_2(state(next_to_2(stateid('nebraska'
Output 0	count(major(city(loc_2(state(next_to_2(stateid(**stateid(** 'nebraska'
N-grams	count(major(city(loc_2(state(next_to_2(stateid(stateid('nebraska' count(major(city(loc_2(state(next_to_2(stateid(stateid('nebraska' count(major(city(loc_2(state(next_to_2('nebraska'

count(major(city(loc_2(state(next_to_2(stateid(
count(major(city(loc_2(state(next_to_2(stateid(
    major(city(loc_2(state(next_to_2(
    major(city(loc_2(
    major(city(loc_2(state(
       city(loc_2(state(
       city(loc_2(state(next_to_2(
         loc_2(state(next_to_2(stateid(

Sentence 61)   BLEU: 0 (1/0.6667/0/0)

Source	How long is the Mississippi
Ref 0	len(riverid('mississippi'
Output 0	len(riverid(**riverid(** 'mississippi'
N-grams	len(riverid(riverid('mississippi' len(riverid(riverid('mississippi' len(riverid('mississippi'

Sentence 62)   BLEU: 0 (1/0.6667/0/0)

Source	How big is Texas
Ref 0	size(stateid('texas'
Output 0	size(stateid(**stateid(** 'texas'
N-grams	size(stateid(stateid('texas' size(stateid(stateid('texas' size(stateid('texas'

Sentence 63)   BLEU: 0.4111 (0.5714/0.5/0.4/0.25)

Source	How many big cities are in Pennsylvania
Ref 0	count(major(city(loc_2(stateid('pennsylvania'
Output 0	**population_1(cityid(big** city(loc_2(stateid('pennsylvania'

N-grams	population_1(cityid(big city(loc_2(stateid('pennsylvania'
	      city(loc_2(stateid('pennsylvania'
	      city(loc_2(stateid('pennsylvania'
	      city(loc_2(stateid(
	      city(loc_2(stateid('pennsylvania'
	        loc_2(stateid(
	        loc_2(stateid('pennsylvania'

Sentence 64)   BLEU: 0.5081 (0.6667/0.6/0.5/0.3333)

Source	Name all the rivers in Colorado
Ref 0	river(loc_2(stateid('colorado'
Output 0	**Name all** river(loc_2(stateid('colorado'

N-grams	Name all river(loc_2(stateid('colorado'
	river(loc_2(stateid('colorado'
	river(loc_2(stateid('colorado'
	river(loc_2(stateid(
	river(loc_2(stateid('colorado'
	loc_2(stateid(
	loc_2(stateid('colorado'

Sentence 65)   **BLEU:** 0 (0.5714/0.3333/0/0)

Source	What is the capital of the state with the most inhabitants
Ref 0	capital(loc_2(largest_one(population_1(state(all
Output 0	capital(loc_2(**stateid(most(** state(all **inhabitants**
N-grams	capital(loc_2(stateid(most(state(all inhabitants capital(loc_2(state(all capital(loc_2(state(all

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Sentence 66)   **BLEU:** 0 (0.75/0.3333/0/0)

Source	What is the population of San Antonio
Ref 0	population_1(cityid('san antonio', _
Output 0	population_1(**stateid(** 'san antonio',
N-grams	population_1(stateid('san antonio', population_1('san antonio', 'san antonio',

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Sentence 67)   **BLEU:** 0 (0.5/0/0/0)

Source	What states does the Delaware river run through
Ref 0	state(traverse_1(river(riverid('delaware'
Output 0	river(**traverse_2(** state(**loc_2(stateid(** 'delaware'
N-grams	river(traverse_2(state(loc_2(stateid('delaware' river(state('delaware'

Sentence 68)   **BLEU:** 0 (1/1/1/0)

Source	What is the largest state
Ref 0	largest(state(all
Output 0	largest(state(all
N-grams	largest(state(all largest(state(all largest(state(largest(state(all state(all

Sentence 69)   **BLEU:** 0 (1/0.6667/0/0)

Source	How large is Alaska
Ref 0	size(stateid('alaska'
Output 0	size(stateid(**stateid(** 'alaska'
N-grams	size(stateid(stateid('alaska' size(stateid(stateid('alaska' size(stateid('alaska'

Sentence 70)   **BLEU:** 1 (1/1/1/1)

Source	Which state has the smallest population density
Ref 0	smallest_one(density_1(state(all
Output 0	smallest_one(density_1(state(all
N-grams	smallest_one(density_1(state(all smallest_one(density_1(state(all smallest_one(density_1(state(all smallest_one(density_1(state(smallest_one(density_1(state(all density_1(state(density_1(state(all

Sentence 71)   **BLEU:** 1 (1/1/1/1)

Source	What is the largest city of Kansas
Ref 0	largest(city(loc_2(stateid('kansas'
Output 0	largest(city(loc_2(stateid('kansas'
N-grams	largest(city(loc_2(stateid('kansas' largest(city(loc_2(stateid('kansas' largest(city(loc_2(stateid(largest(city(loc_2(stateid('kansas' largest(city(loc_2(stateid(city(loc_2(city(loc_2(stateid(city(loc_2(stateid('kansas' loc_2(stateid('kansas'

Sentence 72)   **BLEU:** 0.5814 (0.8/0.6667/0.5/0.4286)

Source	What states border the state with the most major cities
Ref 0	state(next_to_2(most(state(loc_1(major(city(all
Output 0	state(next_to_2(**stateid(the** most(state(loc_1(major(city(all
N-grams	state(next_to_2(stateid(the most(state(loc_1(major(city(all state(next_to_2(most(state(loc_1(major(city(all state(next_to_2(most(state(loc_1(major(city(all

most(state(loc_1(major(city(
most(state(loc_1(major(
state(loc_1(major(city(all
state(loc_1(major(
state(loc_1(major(city(
loc_1(major(city(
loc_1(major(city(all

Sentence 73)   **BLEU:** 1 (1/1/1/1)

Source	What is the capital of Utah
Ref 0	capital(loc_2(stateid('utah'
Output 0	capital(loc_2(stateid('utah'
N-grams	capital(loc_2(stateid('utah' capital(loc_2(stateid('utah' capital(loc_2(stateid('utah' capital(loc_2(stateid(capital(loc_2(stateid('utah' loc_2(stateid(loc_2(stateid('utah'

Sentence 74)   **BLEU:** 0.5969 (0.8889/0.75/0.5714/0.3333)

Source	How high is the highest point in the largest state
Ref 0	elevation_1(highest(place(loc_2(largest(state(all
Output 0	elevation_1(highest(place(loc_2(**stateid(loc_2(** largest(state(all
N-grams	elevation_1(highest(place(loc_2(stateid(loc_2(largest(state(all elevation_1(highest(place(loc_2(loc_2(largest(state(all elevation_1(highest(place(loc_2(loc_2(largest(state(elevation_1(highest(place(loc_2(largest(state(all elevation_1(highest(place(loc_2(largest(state(all highest(place(largest(state(highest(place(loc_2(largest(state(all

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Sentence 75)   **BLEU:** 0 (0.6667/0.4/0/0)

Source	What river is the longest one in the United States
Ref 0	longest(river(loc_2(countryid('usa'
Output 0	longest(river(**all one** countryid('usa'
N-grams	longest(river(all one countryid('usa' longest(river(countryid('usa' longest(river(countryid('usa'

Sentence 76)   **BLEU:** 1 (1/1/1/1)

Source	What is the area of New Mexico

Ref 0	area_1(stateid('new mexico'
Output 0	area_1(stateid('new mexico'

N-grams	area_1(stateid('new mexico'
	area_1(stateid('new mexico'
	area_1(stateid('new mexico'
	area_1(stateid('new
	area_1(stateid('new mexico'
	     stateid('new
	     stateid('new mexico'

Sentence 77)   BLEU: 1 (1/1/1/1)

Source	What is the capital of Hawaii
Ref 0	capital(loc_2(stateid('hawaii'
Output 0	capital(loc_2(stateid('hawaii'

N-grams	capital(loc_2(stateid('hawaii'
	capital(loc_2(stateid('hawaii'
	capital(loc_2(stateid('hawaii'
	capital(loc_2(stateid(
	capital(loc_2(stateid('hawaii'
	     loc_2(stateid(
	     loc_2(stateid('hawaii'

Sentence 78)   BLEU: 0 (1/0.5/0.3333/0)

Source	How long is the Missouri river
Ref 0	len(river(riverid('missouri'
Output 0	len(riverid(river(**riverid(** 'missouri'

N-grams	len(riverid(river(riverid('missouri'
	len(riverid(river(riverid('missouri'
	        river(riverid('missouri'
	        river(riverid('missouri'

Sentence 79)   BLEU: 0.5373 (0.8333/0.6/0.5/0.3333)

Source	What states have cities named Dallas
Ref 0	state(loc_1(city(cityid('dallas', _
Output 0	state(loc_1(city(cityid(**stateid(** 'dallas',

N-grams	state(loc_1(city(cityid(stateid('dallas',
	state(loc_1(city(cityid('dallas',
	state(loc_1(city(cityid(
	state(loc_1(city(
	state(loc_1(city(cityid(
	      loc_1(city(
	      loc_1(city(cityid(

Sentence 80)   BLEU: 0.4889 (0.8571/0.6667/0.4/0.25)

Source	How many rivers are found in Colorado
Ref 0	count(river(loc_2(stateid('colorado'
Output 0	count(river(loc_2(stateid(**found stateid(** 'colorado'

N-grams	count(river(loc_2(stateid(found stateid('colorado'
	count(river(loc_2(stateid(stateid('colorado'
	count(river(loc_2(stateid('colorado'
	count(river(loc_2(
	count(river(loc_2(stateid(
	        river(loc_2(
	        river(loc_2(stateid(

Sentence 81)   BLEU: 0.5 (0.875/0.7143/0.5/0.2)

Source	What is the smallest city in the largest state
Ref 0	smallest(city(loc_2(largest(state(all
Output 0	smallest(city(loc_2(**stateid(loc_2(** largest(state(all

N-grams	smallest(city(loc_2(stateid(loc_2(largest(state(all
	smallest(city(loc_2(loc_2(largest(state(all
	smallest(city(loc_2(largest(state(
	smallest(city(loc_2(loc_2(largest(state(all
	        city(loc_2(largest(state(all
	                                largest(state(
	                                largest(state(all

Sentence 82)   BLEU: 1 (1/1/1/1)

Source	What state has the highest population
Ref 0	largest_one(population_1(state(all
Output 0	largest_one(population_1(state(all

N-grams	largest_one(population_1(state(all
	largest_one(population_1(state(all
	largest_one(population_1(state(all
	largest_one(population_1(state(
	largest_one(population_1(state(all
	                population_1(state(
	                population_1(state(all

Sentence 83)   BLEU: 0 (0.7778/0.375/0.1429/0)

Source	What states have a capital that is the highest point in the state
Ref 0	state(loc_1(capital(highest(place(all
Output 0	highest(place(**loc_2(** state(loc_1(capital(**that state(** all

N-grams	highest(place(loc_2(state(loc_1(capital(that state(all
	highest(place(state(loc_1(capital(all
	highest(place(state(loc_1(
	state(loc_1(capital(
	loc_1(capital(

Sentence 84)   BLEU: 1 (1/1/1/1)

Source	What rivers are in New Mexico
Ref 0	river(loc_2(stateid('new mexico'
Output 0	river(loc_2(stateid('new mexico'
N-grams	river(loc_2(stateid('new mexico'
	river(loc_2(stateid('new mexico'
	river(loc_2(stateid('new
	river(loc_2(stateid('new mexico'
	river(loc_2(stateid('new
	loc_2(stateid(
	loc_2(stateid('new
	loc_2(stateid('new mexico'
	stateid('new mexico'

Sentence 85)   BLEU: 0 (0.6/0.5/0.3333/0)

Source	How many cities are there in the US
Ref 0	count(city(loc_2(countryid('usa'
Output 0	count(city(loc_2(**stateid(US**
N-grams	count(city(loc_2(stateid(US
	count(city(loc_2(
	count(city(
	count(city(loc_2(
	city(loc_2(

Sentence 86)   BLEU: 0.8091 (0.8571/0.8333/0.8/0.75)

Source	What is the city in Texas with the largest population
Ref 0	largest_one(population_1(city(loc_2(stateid('texas'
Output 0	**loc_1(** largest_one(population_1(city(loc_2(stateid('texas'
N-grams	loc_1(largest_one(population_1(city(loc_2(stateid('texas'
	largest_one(population_1(city(loc_2(stateid('texas'
	largest_one(population_1(city(loc_2(stateid('texas'
	largest_one(population_1(city(loc_2(stateid(
	largest_one(population_1(city(loc_2(
	population_1(city(loc_2(stateid('texas'
	population_1(city(loc_2(
	population_1(city(loc_2(stateid(
	city(loc_2(stateid(

city(loc_2(stateid('texas'

Sentence 87)   BLEU: 0.7506 (0.8889/0.75/0.7143/0.6667)

Source	What is the population of the largest city in the state with the largest area
Ref 0	population_1(largest(city(loc_2(largest_one(area_1(state(all
Output 0	population_1(**stateid(** largest(city(loc_2(largest_one(area_1(state(all

N-grams

population_1(stateid(largest(city(loc_2(largest_one(area_1(state(all
population_1(largest(city(loc_2(largest_one(area_1(state(all
                                      largest(city(loc_2(largest_one(area_1(state(
                                      largest(city(loc_2(largest_one(area_1(state(all
                                      largest(city(loc_2(largest_one(area_1(state(all
                                                city(loc_2(largest_one(area_1(state(
                                                city(loc_2(largest_one(
                                                city(loc_2(largest_one(area_1(
                                                        loc_2(largest_one(area_1(
                                                        loc_2(largest_one(area_1(state(
                                                                largest_one(area_1(state(all

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Sentence 88)   BLEU: 0.7598 (0.8333/0.8/0.75/0.6667)

Source	Where is the lowest point in the US
Ref 0	lowest(place(loc_2(countryid('usa'
Output 0	**loc_1(** lowest(place(loc_2(countryid('usa'

N-grams

loc_1(lowest(place(loc_2(countryid('usa'
        lowest(place(loc_2(countryid('usa'
        lowest(place(loc_2(countryid(
        lowest(place(loc_2(countryid('usa'
        lowest(place(loc_2(countryid(
                place(loc_2(
                place(loc_2(countryid(
                place(loc_2(countryid('usa'
                        loc_2(countryid('usa'

Sentence 89)   BLEU: 0.5081 (0.6667/0.6/0.5/0.3333)

Source	What states have cities named Plano
Ref 0	state(loc_1(city(cityid('plano', _
Output 0	state(loc_1(city(cityid(**stateid(Plano**
N-grams	state(loc_1(city(cityid(stateid(Plano

state(loc_1(city(cityid(stateid(Plano
state(loc_1(city(cityid(
state(loc_1(city(cityid(
state(loc_1(city(
state(loc_1(city(cityid(
        loc_1(city(

loc_1(city(cityid(

Sentence 90)   BLEU: 0 (0.6/0.25/0/0)

Source	Which US city has the highest population density
Ref 0	largest_one(density_1(city(all
Output 0	**Which US** city(largest_one(density_1(

N-grams	Which US city(largest_one(density_1(
	          city(largest_one(density_1(
	                    largest_one(density_1(

Sentence 91)   BLEU: 0 (0.6667/0.375/0.1429/0)

Source	What is the length of the river that runs through the most number of states
Ref 0	len(most(river(traverse_2(state(all
Output 0	len(**stateid(loc_2(** most(river(traverse_2(**number** state(all

N-grams	len(stateid(loc_2(most(river(traverse_2(number state(all
	len(most(river(traverse_2(state(all
	                   most(river(state(all
	                   most(river(traverse_2(
	                         river(traverse_2(

Sentence 92)   BLEU: 0 (0.5/0.2/0/0)

Source	How much population does Texas have
Ref 0	population_1(stateid('texas'
Output 0	population_1(**much loc_2(** stateid('texas' **have**
N-grams	population_1(much loc_2(stateid('texas' have population_1(stateid('texas' stateid('texas'

Sentence 93)   BLEU: 0 (0.75/0.6667/0.5/0)

Source	Which state contains most rivers
Ref 0	most(state(loc_1(river(all
Output 0	state(loc_1(river(**most**
N-grams	state(loc_1(river(most state(loc_1(river(state(loc_1(state(loc_1(river(loc_1(river(

Sentence 94)   BLEU: 1 (1/1/1/1)

Source	What is the lowest point in Arkansas
Ref 0	

	lowest(place(loc_2(stateid('arkansas'
Output 0	lowest(place(loc_2(stateid('arkansas'

N-grams	lowest(place(loc_2(stateid('arkansas'
	lowest(place(loc_2(stateid('arkansas'
	lowest(place(loc_2(stateid(
	lowest(place(loc_2(stateid('arkansas'
	lowest(place(loc_2(stateid(
	    place(loc_2(
	    place(loc_2(stateid(
	    place(loc_2(stateid('arkansas'
	        loc_2(stateid('arkansas'

Sentence 95)   BLEU: 0.6148 (0.7143/0.6667/0.6/0.5)

Source	What states does the Colorado river run through
Ref 0	state(traverse_1(river(riverid('colorado'
Output 0	**What** state(traverse_1(river(riverid('colorado' **through**

N-grams	What state(traverse_1(river(riverid('colorado' through
	    state(traverse_1(river(riverid('colorado'
	    state(traverse_1(river(riverid(
	    state(traverse_1(river(riverid('colorado'
	    state(traverse_1(river(riverid(
	        traverse_1(river(
	        traverse_1(river(riverid(
	        traverse_1(river(riverid('colorado'
	            river(riverid('colorado'

Sentence 96)   BLEU: 0.5946 (0.875/0.7143/0.5/0.4)

Source	Which states border the longest river in the USA
Ref 0	state(next_to_2(longest(river(loc_2(countryid('usa'
Output 0	state(next_to_2(**stateid(** longest(river(loc_2(countryid('usa'

N-grams	state(next_to_2(stateid(longest(river(loc_2(countryid('usa'
	state(next_to_2(longest(river(loc_2(countryid('usa'
	state(next_to_2(longest(river(loc_2(countryid(
	                    longest(river(loc_2(countryid('usa'
	                    longest(river(loc_2(countryid(
	                        river(loc_2(
	                        river(loc_2(countryid(
	                        river(loc_2(countryid('usa'
	                            loc_2(countryid('usa'

Sentence 97)   BLEU: 0 (0.8333/0.6/0.25/0)

Source	What cities are located in Pennsylvania
Ref 0	city(loc_2(stateid('pennsylvania'

Output 0	city(loc_2(stateid(**located stateid(** 'pennsylvania'
N-grams	city(loc_2(stateid(located stateid('pennsylvania' city(loc_2(stateid(stateid('pennsylvania' city(loc_2('pennsylvania' city(loc_2(stateid(loc_2(stateid(

Sentence 98)   BLEU: 1 (1/1/1/1)

Source	What is the smallest city in Washington
Ref 0	smallest(city(loc_2(stateid('washington'
Output 0	smallest(city(loc_2(stateid('washington'

N-grams	smallest(city(loc_2(stateid('washington'
	smallest(city(loc_2(stateid('washington'
	smallest(city(loc_2(stateid(
	smallest(city(loc_2(stateid('washington'
	smallest(city(loc_2(stateid(
	            city(loc_2(
	            city(loc_2(stateid(
	            city(loc_2(stateid('washington'
	                    loc_2(stateid('washington'

Sentence 99)   BLEU: 0 (0.7/0.3333/0.125/0)

Source	How many rivers are in the state that has the most rivers
Ref 0	count(river(loc_2(most(state(loc_1(river(all
Output 0	count(river(loc_2(state(**stateid(that** most(**has** river(all
N-grams	count(river(loc_2(state(stateid(that most(has river(all count(river(loc_2(state(most(river(all count(river(river(all count(river(loc_2(river(loc_2(

Sentence 100)   BLEU: 1 (1/1/1/1)

Source	What is the lowest point in Mississippi
Ref 0	lowest(place(loc_2(stateid('mississippi'
Output 0	lowest(place(loc_2(stateid('mississippi'

N-grams	lowest(place(loc_2(stateid('mississippi'
	lowest(place(loc_2(stateid('mississippi'
	lowest(place(loc_2(stateid(
	lowest(place(loc_2(stateid('mississippi'
	lowest(place(loc_2(stateid(
	            place(loc_2(
	            place(loc_2(stateid(

place(loc_2(stateid('mississippi'

loc_2(stateid('mississippi'

Sentence 101)   BLEU: 1 (1/1/1/1)

Source	What are the major cities in Ohio
Ref 0	major(city(loc_2(stateid('ohio'
Output 0	major(city(loc_2(stateid('ohio'
N-grams	major(city(loc_2(stateid('ohio' major(city(loc_2(stateid('ohio' major(city(loc_2(stateid(major(city(loc_2(stateid('ohio' major(city(loc_2(stateid(　　　city(loc_2(　　　city(loc_2(stateid(　　　city(loc_2(stateid('ohio' 　　　　loc_2(stateid('ohio'

Sentence 102)   BLEU: 1 (1/1/1/1)

Source	What is the population density of South Dakota
Ref 0	density_1(stateid('south dakota'
Output 0	density_1(stateid('south dakota'
N-grams	density_1(stateid('south dakota' density_1(stateid('south dakota' density_1(stateid('south dakota' density_1(stateid('south density_1(stateid('south dakota' 　　　stateid('south 　　　stateid('south dakota'

Sentence 103)   BLEU: 1 (1/1/1/1)

Source	What is the lowest point in Massachusetts
Ref 0	lowest(place(loc_2(stateid('massachusetts'
Output 0	lowest(place(loc_2(stateid('massachusetts'
N-grams	lowest(place(loc_2(stateid('massachusetts' lowest(place(loc_2(stateid('massachusetts' lowest(place(loc_2(stateid(lowest(place(loc_2(stateid('massachusetts' lowest(place(loc_2(stateid(　　　place(loc_2(　　　place(loc_2(stateid(　　　place(loc_2(stateid('massachusetts' 　　　　loc_2(stateid('massachusetts'

Sentence 104) **BLEU:** 0.5373 (0.8333/0.6/0.5/0.3333)

Source	How many people live in the capital of Georgia
Ref 0	population_1(capital(loc_2(stateid('georgia'
Output 0	population_1(**cityid(** capital(loc_2(stateid('georgia'

N-grams	population_1(cityid(capital(loc_2(stateid('georgia'
	population_1(capital(loc_2(stateid('georgia'
	             capital(loc_2(stateid('georgia'
	             capital(loc_2(stateid(
	             capital(loc_2(stateid('georgia'
	                     loc_2(stateid(
	                     loc_2(stateid('georgia'

Sentence 105) **BLEU:** 0.6687 (0.8/0.75/0.6667/0.5)

Source	What mountains are in Alaska
Ref 0	mountain(loc_2(stateid('alaska'
Output 0	**What** mountain(loc_2(stateid('alaska'

N-grams	What mountain(loc_2(stateid('alaska'
	      mountain(loc_2(stateid('alaska'
	      mountain(loc_2(stateid('alaska'
	      mountain(loc_2(stateid(
	      mountain(loc_2(stateid('alaska'
	              loc_2(stateid(
	              loc_2(stateid('alaska'

Sentence 106) **BLEU:** 0 (1/1/1/0)

Source	How many people live in Houston
Ref 0	population_1(cityid('houston', _
Output 0	population_1(cityid('houston',
N-grams	population_1(cityid('houston', population_1(cityid('houston', population_1(cityid(population_1(cityid('houston', cityid('houston',

Sentence 107) **BLEU:** 0 (0.6667/0.2/0/0)

Source	How long is the North Platte river
Ref 0	len(river(riverid('north platte'
Output 0	len(riverid('north **Platte** river(**all**
N-grams	len(riverid('north Platte river(all len(riverid('north river(riverid('north

Sentence 108)   BLEU: 1 (1/1/1/1)

Source	What state is Dallas in
Ref 0	state(loc_1(cityid('dallas', _
Output 0	state(loc_1(cityid('dallas', _
N-grams	state(loc_1(cityid('dallas', _ state(loc_1(cityid('dallas', _ state(loc_1(cityid('dallas', state(loc_1(cityid('dallas', _ state(loc_1(cityid('dallas', loc_1(cityid(loc_1(cityid('dallas', loc_1(cityid('dallas', _ cityid('dallas', _

Sentence 109)   BLEU: 1 (1/1/1/1)

Source	What state has the highest elevation
Ref 0	state(loc_1(highest(place(all
Output 0	state(loc_1(highest(place(all
N-grams	state(loc_1(highest(place(all state(loc_1(highest(place(all state(loc_1(highest(place(state(loc_1(highest(place(all state(loc_1(highest(place(loc_1(highest(loc_1(highest(place(loc_1(highest(place(all highest(place(all

Sentence 110)   BLEU: 1 (1/1/1/1)

Source	What is the most populous city
Ref 0	largest_one(population_1(city(all
Output 0	largest_one(population_1(city(all
N-grams	largest_one(population_1(city(all largest_one(population_1(city(all largest_one(population_1(city(all largest_one(population_1(city(largest_one(population_1(city(all population_1(city(population_1(city(all

Sentence 111)   BLEU: 0.7598 (0.8333/0.8/0.75/0.6667)

Source	What is the total population of the states that border Texas

Ref 0	sum(population_1(state(next_to_2(stateid('texas'
Output 0	**total** population_1(state(next_to_2(stateid('texas'

N-grams	total population_1(state(next_to_2(stateid('texas'
	    population_1(state(next_to_2(stateid('texas'
	    population_1(state(next_to_2(stateid(
	    population_1(state(next_to_2(stateid('texas'
	    population_1(state(next_to_2(stateid(
	        state(next_to_2(
	        state(next_to_2(stateid(
	        state(next_to_2(stateid('texas'
	            next_to_2(stateid('texas'

Sentence 112)   BLEU: 0.5133 (0.7778/0.625/0.4286/0.3333)

Source	What states border the state that borders the most states
Ref 0	state(next_to_2(most(state(next_to_2(state(all
Output 0	state(next_to_2(**stateid(the** most(state(next_to_2(state(all

N-grams	state(next_to_2(stateid(the most(state(next_to_2(state(all
	state(next_to_2(most(state(next_to_2(state(all
	state(next_to_2(most(state(next_to_2(state(
	                most(state(next_to_2(state(all
	                most(state(next_to_2(state(
	                    state(next_to_2(
	                    state(next_to_2(state(
	                    state(next_to_2(state(all
	                        next_to_2(state(all

Sentence 113)   BLEU: 0 (0.5/0/0/0)

Source	Which state has the highest population density
Ref 0	largest_one(density_1(state(all
Output 0	state(**loc_1(highest(** density_1(
N-grams	state(loc_1(highest(density_1(state(density_1(

Sentence 114)   BLEU: 1 (1/1/1/1)

Source	How many cities are in Louisiana
Ref 0	count(city(loc_2(stateid('louisiana'
Output 0	count(city(loc_2(stateid('louisiana'
N-grams	count(city(loc_2(stateid('louisiana' count(city(loc_2(stateid('louisiana' count(city(loc_2(stateid(count(city(loc_2(stateid('louisiana'

count(city(loc_2(stateid(
city(loc_2(
city(loc_2(stateid(
city(loc_2(stateid('louisiana'
loc_2(stateid('louisiana'

Sentence 115)   **BLEU:** 1 (1/1/1/1)

Source	What states border Wisconsin
Ref 0	state(next_to_2(stateid('wisconsin'
Output 0	state(next_to_2(stateid('wisconsin'

N-grams	state(next_to_2(stateid('wisconsin' state(next_to_2(stateid('wisconsin' state(next_to_2(stateid('wisconsin' state(next_to_2(stateid(state(next_to_2(stateid('wisconsin' next_to_2(stateid(next_to_2(stateid('wisconsin'

Sentence 116)   **BLEU:** 1 (1/1/1/1)

Source	Which states border Kentucky
Ref 0	state(next_to_2(stateid('kentucky'
Output 0	state(next_to_2(stateid('kentucky'

N-grams	state(next_to_2(stateid('kentucky' state(next_to_2(stateid('kentucky' state(next_to_2(stateid('kentucky' state(next_to_2(stateid(state(next_to_2(stateid('kentucky' next_to_2(stateid(next_to_2(stateid('kentucky'

Sentence 117)   **BLEU:** 1 (1/1/1/1)

Source	What is the most populous state
Ref 0	largest_one(population_1(state(all
Output 0	largest_one(population_1(state(all

N-grams	largest_one(population_1(state(all largest_one(population_1(state(all largest_one(population_1(state(all largest_one(population_1(state(largest_one(population_1(state(all population_1(state(population_1(state(all

Sentence 118)   **BLEU:** 0 (0.6667/0.4/0.25/0)

Source	What is the area of the largest state
Ref 0	area_1(largest(state(all
Output 0	area_1(**stateid(loc_2(** largest(state(all

N-grams	area_1(stateid(loc_2(largest(state(all
	area_1(largest(state(all
	                                  largest(state(
	                                  largest(state(all
	                                            state(all

Sentence 119)   **BLEU:** 0 (0.8/0.5/0.3333/0)

Source	What state is Pittsburgh in
Ref 0	state(loc_1(cityid('pittsburgh', _
Output 0	state(loc_1(cityid(**Pittsburgh** _
N-grams	state(loc_1(cityid(Pittsburgh _ state(loc_1(cityid(_ state(loc_1(state(loc_1(cityid(loc_1(cityid(

Sentence 120)   **BLEU:** 1 (1/1/1/1)

Source	What is the highest point in Texas
Ref 0	highest(place(loc_2(stateid('texas'
Output 0	highest(place(loc_2(stateid('texas'

N-grams	highest(place(loc_2(stateid('texas'
	highest(place(loc_2(stateid('texas'
	highest(place(loc_2(stateid(
	highest(place(loc_2(stateid('texas'
	highest(place(loc_2(stateid(
	        place(loc_2(
	        place(loc_2(stateid(
	        place(loc_2(stateid('texas'
	                loc_2(stateid('texas'

Sentence 121)   **BLEU:** 0.6687 (0.8/0.75/0.6667/0.5)

Source	Where is Mount Whitney located
Ref 0	loc_1(placeid('mount whitney'
Output 0	loc_1(placeid('mount whitney' **located**
N-grams	loc_1(placeid('mount whitney' located loc_1(placeid('mount whitney' loc_1(placeid('mount whitney'

loc_1(placeid('mount
loc_1(placeid('mount whitney'
        placeid('mount
        placeid('mount whitney'

Sentence 122)   BLEU: 1 (1/1/1/1)

Source	What state has the largest city
Ref 0	state(loc_1(largest(city(all
Output 0	state(loc_1(largest(city(all

N-grams	state(loc_1(largest(city(all
	state(loc_1(largest(city(all
	state(loc_1(largest(city(
	state(loc_1(largest(city(all
	state(loc_1(largest(city(
	    loc_1(largest(
	    loc_1(largest(city(
	    loc_1(largest(city(all
	        largest(city(all

Sentence 123)   BLEU: 1 (1/1/1/1)

Source	What are the major cities in New Mexico
Ref 0	major(city(loc_2(stateid('new mexico'
Output 0	major(city(loc_2(stateid('new mexico'

N-grams	major(city(loc_2(stateid('new mexico'
	major(city(loc_2(stateid('new mexico'
	major(city(loc_2(stateid('new mexico'
	major(city(loc_2(stateid('new
	major(city(loc_2(stateid(
	    city(loc_2(stateid('new mexico'
	    city(loc_2(stateid(
	    city(loc_2(stateid('new
	        loc_2(stateid('new
	        loc_2(stateid('new mexico'

Sentence 124)   BLEU: 0.3549 (0.6667/0.5/0.2857/0.1667)

Source	What is the capital of states that have cities named Durham
Ref 0	capital(loc_2(state(loc_1(city(cityid('durham', _
Output 0	capital(loc_2(**stateid(that** state(loc_1(city(cityid(**Durham**

N-grams	capital(loc_2(stateid(that state(loc_1(city(cityid(Durham
	capital(loc_2(state(loc_1(city(cityid(
	capital(loc_2(state(loc_1(city(cityid(
	                state(loc_1(city(
	                state(loc_1(city(cityid(

loc_1(city(
loc_1(city(cityid(

Sentence 125)　**BLEU:** 0 (0.8571/0.6667/0.4/0)

Source	What are the names of the major cities in Illinois
Ref 0	major(city(loc_2(stateid('illinois'
Output 0	major(city(loc_2(**names loc_2(** stateid('illinois'

N-grams	major(city(loc_2(names loc_2(stateid('illinois' major(city(loc_2(　　　　loc_2(stateid('illinois' major(city(　　　　　　loc_2(stateid('illinois' major(city(loc_2(　　　　　　stateid(　　city(loc_2(　　　　　　stateid('illinois'

Sentence 126)　**BLEU:** 1 (1/1/1/1)

Source	What states border New Jersey
Ref 0	state(next_to_2(stateid('new jersey'
Output 0	state(next_to_2(stateid('new jersey'

N-grams	state(next_to_2(stateid('new jersey' state(next_to_2(stateid('new jersey' state(next_to_2(stateid('new state(next_to_2(stateid('new jersey' state(next_to_2(stateid('new 　　next_to_2(stateid(　　next_to_2(stateid('new 　　next_to_2(stateid('new jersey' 　　　　　stateid('new jersey'

Sentence 127)　**BLEU:** 1 (1/1/1/1)

Source	What state borders Michigan
Ref 0	state(next_to_2(stateid('michigan'
Output 0	state(next_to_2(stateid('michigan'

N-grams	state(next_to_2(stateid('michigan' state(next_to_2(stateid('michigan' state(next_to_2(stateid('michigan' state(next_to_2(stateid(state(next_to_2(stateid('michigan' 　　next_to_2(stateid(　　next_to_2(stateid('michigan'

Sentence 128)　**BLEU:** 1 (1/1/1/1)

Source	What is the smallest state bordering Ohio
Ref 0	smallest(state(next_to_2(stateid('ohio'

Output 0	smallest(state(next_to_2(stateid('ohio'
N-grams	smallest(state(next_to_2(stateid('ohio' smallest(state(next_to_2(stateid('ohio' smallest(state(next_to_2(stateid(smallest(state(next_to_2(stateid('ohio' smallest(state(next_to_2(stateid(state(next_to_2(state(next_to_2(stateid(state(next_to_2(stateid('ohio' next_to_2(stateid('ohio'

Sentence 129)   **BLEU:** 0 (0.8571/0.5/0.2/0)

Source	Which state has the most major rivers running through it
Ref 0	most(state(traverse_1(major(river(all
Output 0	traverse_1(most(state(**loc_1(** major(river(all

N-grams	traverse_1(most(state(loc_1(major(river(all
	traverse_1(most(state(major(river(all
	          most(state(major(river(
	                              major(river(all
	                                        river(all

Sentence 130)   **BLEU:** 0.4111 (0.6/0.4444/0.375/0.2857)

Source	In which state does the highest point in USA exist
Ref 0	state(loc_1(highest(place(loc_2(countryid('usa'
Output 0	**In which** state(**traverse_1(** highest(place(loc_2(countryid('usa' **exist**

N-grams	In which state(traverse_1(highest(place(loc_2(countryid('usa' exist
	          state(highest(place(loc_2(countryid('usa'
	                              highest(place(loc_2(countryid(
	                              highest(place(loc_2(countryid('usa'
	                              highest(place(loc_2(countryid(
	                                        place(loc_2(
	                                        place(loc_2(countryid(
	                                        place(loc_2(countryid('usa'
	                                                  loc_2(countryid('usa'

Sentence 131)   **BLEU:** 0.6804 (0.75/0.7143/0.6667/0.6)

Source	How many states does the Mississippi river run through
Ref 0	count(state(traverse_1(river(riverid('mississippi'
Output 0	count(state(traverse_1(river(riverid('mississippi' **How through**
N-grams	count(state(traverse_1(river(riverid('mississippi' How through count(state(traverse_1(river(riverid('mississippi' count(state(traverse_1(river(riverid('mississippi'

count(state(traverse_1(river(riverid(
count(state(traverse_1(river(
        state(traverse_1(river(riverid('mississippi'
        state(traverse_1(river(
        state(traverse_1(river(riverid(
                traverse_1(river(riverid(
                traverse_1(river(riverid('mississippi'

Sentence 132)   BLEU: 0 (0.6667/0.2/0/0)

Source	What is the capital of the Florida state
Ref 0	capital(loc_2(state(stateid('florida'
Output 0	capital(loc_2(stateid(**Florida** state(**all**
N-grams	capital(loc_2(stateid(Florida state(all capital(loc_2(stateid(state(capital(loc_2(

Sentence 133)   BLEU: 1 (1/1/1/1)

Source	Which state has the sparsest population density
Ref 0	smallest_one(density_1(state(all
Output 0	smallest_one(density_1(state(all

N-grams	smallest_one(density_1(state(all
	 smallest_one(density_1(state(all
	 smallest_one(density_1(state(all
	 smallest_one(density_1(state(
	 smallest_one(density_1(state(all
	             density_1(state(
	             density_1(state(all

Sentence 134)   BLEU: 0.4799 (0.6364/0.5/0.4444/0.375)

Source	Could you tell me what is the highest point in the state of Oregon
Ref 0	highest(place(loc_2(state(stateid('oregon'
Output 0	**Could you tell** stateid(**low_point_1(** highest(place(loc_2(state(**stateid(** 'oregon'

N-grams	Could you tell stateid(low_point_1(highest(place(loc_2(state(stateid('oregon'
	                    stateid(highest(place(loc_2(state(stateid('oregon'
	                                        highest(place(loc_2(state('oregon'
	                                        highest(place(loc_2(state(stateid(
	                                        highest(place(loc_2(state(
	                                            place(loc_2(state(stateid('oregon'
	                                            place(loc_2(state(
	                                            place(loc_2(state(stateid(
	                                                loc_2(state(stateid(
	                                                loc_2(state(stateid('oregon'

Sentence 135)   BLEU: 0 (1/0.6667/0/0)

Source	How big is Alaska
Ref 0	size(stateid('alaska'
Output 0	size(stateid(**stateid(** 'alaska'
N-grams	size(stateid(stateid('alaska' size(stateid(stateid('alaska' size(stateid('alaska'

Sentence 136)   BLEU: 0 (0.3333/0/0/0)

Source	What is the population of Dallas
Ref 0	population_1(cityid('dallas', _
Output 0	population_1(**stateid(Dallas**
N-grams	population_1(stateid(Dallas population_1(

Sentence 137)   BLEU: 0 (0.4286/0.1667/0/0)

Source	What states have rivers running through them
Ref 0	state(traverse_1(river(all
Output 0	state(**loc_1(** river(all **running through them**
N-grams	state(loc_1(river(all running through them state(river(all river(all

Sentence 138)   BLEU: 0 (0.5714/0.3333/0.2/0)

Source	Name the states which have no surrounding states
Ref 0	exclude(state(all , next_to_2(state(all
Output 0	**Name loc_2(** state(all , **surrounding** state(

N-grams	Name loc_2(state(all , surrounding state(
	            state(all , state(
	            state(all
	            state(all ,
	                all ,

Sentence 139)   BLEU: 0.5 (0.875/0.7143/0.5/0.2)

Source	How many states border the state with the largest population
Ref 0	count(state(next_to_2(largest_one(population_1(state(all
Output 0	count(state(next_to_2(**stateid(** largest_one(population_1(state(all
N-grams	count(state(next_to_2(stateid(largest_one(population_1(state(all count(state(next_to_2(largest_one(population_1(state(all count(state(largest_one(population_1(state(all

count(state(next_to_2(	largest_one(population_1(state(
state(next_to_2(	largest_one(population_1(state(all
	population_1(state(
	population_1(state(all

Sentence 140)   **BLEU:** 0 (0.625/0.4286/0.1667/0)

Source	What is the largest of the states that the Rio Grande runs through
Ref 0	largest(state(traverse_1(riverid('rio grande'
Output 0	largest(state(**all that** riverid('rio grande' **traverse_2(**

N-grams	largest(state(all that riverid('rio grande' traverse_2(
	 largest(state(riverid('rio grande'
	 largest(state(riverid('rio
	                    riverid('rio grande'
	                              'rio grande'

Sentence 141)   **BLEU:** 1 (1/1/1/1)

Source	What state has the largest area
Ref 0	largest_one(area_1(state(all
Output 0	largest_one(area_1(state(all

N-grams	largest_one(area_1(state(all
	 largest_one(area_1(state(all
	 largest_one(area_1(state(all
	 largest_one(area_1(state(
	 largest_one(area_1(state(all
	              area_1(state(
	              area_1(state(all

Sentence 142)   **BLEU:** 0.7598 (0.8333/0.8/0.75/0.6667)

Source	How many states does Tennessee border
Ref 0	count(state(next_to_1(stateid('tennessee'
Output 0	count(state(next_to_1(stateid('tennessee' **border**

N-grams	count(state(next_to_1(stateid('tennessee' border
	 count(state(next_to_1(stateid('tennessee'
	 count(state(next_to_1(stateid(
	 count(state(next_to_1(stateid('tennessee'
	 count(state(next_to_1(stateid(
	        state(next_to_1(
	        state(next_to_1(stateid(
	        state(next_to_1(stateid('tennessee'
	                  next_to_1(stateid('tennessee'

Sentence 143)   **BLEU:** 0.6148 (0.7143/0.6667/0.6/0.5)

Source	What is the biggest capital city in the US
Ref 0	largest(capital(city(loc_2(countryid('usa'
Output 0	**biggest stateid(** capital(city(loc_2(countryid('usa'
N-grams	biggest stateid(capital(city(loc_2(countryid('usa' capital(city(loc_2(countryid('usa' capital(city(loc_2(countryid(capital(city(loc_2(countryid('usa' capital(city(loc_2(countryid(city(loc_2(city(loc_2(countryid(city(loc_2(countryid('usa' loc_2(countryid('usa'

Sentence 144)   **BLEU:** 0 (0.5714/0.3333/0/0)

Source	What is the longest river flowing through New York
Ref 0	longest(river(traverse_2(stateid('new york'
Output 0	longest(river(**all flowing through** 'new york'
N-grams	longest(river(all flowing through 'new york' longest(river('new york' longest(river('new york'

Sentence 145)   **BLEU:** 1 (1/1/1/1)

Source	What is the largest city in a state that borders Texas
Ref 0	largest(city(loc_2(state(next_to_2(stateid('texas'
Output 0	largest(city(loc_2(state(next_to_2(stateid('texas'
N-grams	largest(city(loc_2(state(next_to_2(stateid('texas' largest(city(loc_2(state(next_to_2(stateid('texas' largest(city(loc_2(state(next_to_2(stateid(largest(city(loc_2(state(next_to_2(stateid('texas' largest(city(loc_2(state(next_to_2(stateid('texas' city(loc_2(state(next_to_2(stateid(city(loc_2(state(city(loc_2(state(next_to_2(loc_2(state(next_to_2(loc_2(state(next_to_2(stateid(state(next_to_2(stateid('texas'

Sentence 146)   **BLEU:** 0 (1/1/1/0)

Source	What is the area of Maine
Ref 0	area_1(stateid('maine'
Output 0	area_1(stateid('maine'
N-grams	

area_1(stateid('maine'
area_1(stateid('maine'
area_1(stateid(
area_1(stateid('maine'
        stateid('maine'

Sentence 147)   **BLEU:** 0 (0.8/0.25/0/0)

Source	What state has the most rivers running through it

Ref 0	most(state(traverse_1(river(all

Output 0	**What** state(traverse_1(most(river(

N-grams	What state(traverse_1(most(river(
	        state(traverse_1(most(river(
	        state(traverse_1(

Sentence 148)   **BLEU:** 0.5081 (0.6667/0.6/0.5/0.3333)

Source	What is the largest capital city in the USA

Ref 0	largest(capital(city(loc_2(countryid('usa'

Output 0	largest(capital(city(loc_2(**stateid(USA**

N-grams	largest(capital(city(loc_2(stateid(USA
	largest(capital(city(loc_2(
	largest(capital(city(loc_2(
	largest(capital(city(
	largest(capital(city(loc_2(
	        capital(city(
	        capital(city(loc_2(

Sentence 149)   **BLEU:** 1 (1/1/1/1)

Source	What state has the highest population density

Ref 0	largest_one(density_1(state(all

Output 0	largest_one(density_1(state(all

N-grams	largest_one(density_1(state(all
	largest_one(density_1(state(all
	largest_one(density_1(state(all
	largest_one(density_1(state(
	largest_one(density_1(state(all
	        density_1(state(
	        density_1(state(all

Sentence 150)   **BLEU:** 0 (1/1/1/0)

Source	What is the size of Texas

Ref 0	size(stateid('texas'

Output 0	

size(stateid('texas'

N-grams	size(stateid('texas' size(stateid('texas' size(stateid(size(stateid('texas' stateid('texas'

Sentence 151)   BLEU: 1 (1/1/1/1)

Source	What is the longest river that flows through Colorado
Ref 0	longest(river(traverse_2(stateid('colorado'
Output 0	longest(river(traverse_2(stateid('colorado'
N-grams	longest(river(traverse_2(stateid('colorado' longest(river(traverse_2(stateid('colorado' longest(river(traverse_2(stateid(longest(river(traverse_2(stateid('colorado' longest(river(traverse_2(stateid(river(traverse_2(river(traverse_2(stateid(river(traverse_2(stateid('colorado' traverse_2(stateid('colorado'

Sentence 152)   BLEU: 1 (1/1/1/1)

Source	Give me the cities in Virginia
Ref 0	city(loc_2(stateid('virginia'
Output 0	city(loc_2(stateid('virginia'
N-grams	city(loc_2(stateid('virginia' city(loc_2(stateid('virginia' city(loc_2(stateid('virginia' city(loc_2(stateid(city(loc_2(stateid('virginia' loc_2(stateid(loc_2(stateid('virginia'

Sentence 153)   BLEU: 0 (0.6/0.5/0.3333/0)

Source	What is the lowest point in USA
Ref 0	lowest(place(loc_2(countryid('usa'
Output 0	lowest(place(loc_2(**stateid(USA**
N-grams	lowest(place(loc_2(stateid(USA lowest(place(loc_2(lowest(place(lowest(place(loc_2(place(loc_2(

Sentence 154)   BLEU: 1 (1/1/1/1)

Source	What are the major cities in Texas
Ref 0	major(city(loc_2(stateid('texas'
Output 0	major(city(loc_2(stateid('texas'

N-grams	major(city(loc_2(stateid('texas'
	major(city(loc_2(stateid('texas'
	major(city(loc_2(stateid(
	major(city(loc_2(stateid('texas'
	major(city(loc_2(stateid(
	     city(loc_2(
	     city(loc_2(stateid(
	     city(loc_2(stateid('texas'
	        loc_2(stateid('texas'

Sentence 155)   BLEU: 0.5 (0.875/0.7143/0.5/0.2)

Source	What are the major cities in the largest state
Ref 0	major(city(loc_2(largest(state(all
Output 0	major(city(loc_2(**stateid(loc_2(** largest(state(all

N-grams	major(city(loc_2(stateid(loc_2(largest(state(all
	major(city(loc_2(loc_2(largest(state(all
	major(city(loc_2(largest(state(
	major(city(loc_2(loc_2(largest(state(all
	     city(loc_2(largest(state(all
	                 largest(state(
	                 largest(state(all

Sentence 156)   BLEU: 0 (0.6/0.5/0.3333/0)

Source	What is the lowest point of the US
Ref 0	lowest(place(loc_2(countryid('usa'
Output 0	lowest(place(loc_2(**stateid(US**
N-grams	lowest(place(loc_2(stateid(US lowest(place(loc_2(lowest(place(lowest(place(loc_2(place(loc_2(

Sentence 157)   BLEU: 1 (1/1/1/1)

Source	What is the highest point in Wyoming
Ref 0	highest(place(loc_2(stateid('wyoming'
Output 0	highest(place(loc_2(stateid('wyoming'
N-grams	highest(place(loc_2(stateid('wyoming'

highest(place(loc_2(stateid('wyoming'
highest(place(loc_2(stateid(
highest(place(loc_2(stateid('wyoming'
highest(place(loc_2(stateid(
place(loc_2(
place(loc_2(stateid(
place(loc_2(stateid('wyoming'
loc_2(stateid('wyoming'

Sentence 158)   BLEU: 1 (1/1/1/1)

Source	What is the capital of Washington
Ref 0	capital(loc_2(stateid('washington'
Output 0	capital(loc_2(stateid('washington'
N-grams	capital(loc_2(stateid('washington' capital(loc_2(stateid('washington' capital(loc_2(stateid('washington' capital(loc_2(stateid(capital(loc_2(stateid('washington' loc_2(stateid(loc_2(stateid('washington'

Sentence 159)   BLEU: 0 (1/1/1/0)

Source	What is the area of Wisconsin
Ref 0	area_1(stateid('wisconsin'
Output 0	area_1(stateid('wisconsin'
N-grams	area_1(stateid('wisconsin' area_1(stateid('wisconsin' area_1(stateid(area_1(stateid('wisconsin' stateid('wisconsin'

Sentence 160)   BLEU: 1 (1/1/1/1)

Source	What rivers are in states that border Texas
Ref 0	river(loc_2(state(next_to_2(stateid('texas'
Output 0	river(loc_2(state(next_to_2(stateid('texas'
N-grams	river(loc_2(state(next_to_2(stateid('texas' river(loc_2(state(next_to_2(stateid('texas' river(loc_2(state(next_to_2(stateid('texas' river(loc_2(state(next_to_2(stateid(river(loc_2(state(next_to_2(loc_2(state(next_to_2(stateid('texas' loc_2(state(next_to_2(

loc_2(state(next_to_2(stateid(
        state(next_to_2(stateid(
        state(next_to_2(stateid('texas'

Sentence 161)   BLEU: 1 (1/1/1/1)

Source	What is the capital of Illinois
Ref 0	capital(loc_2(stateid('illinois'
Output 0	capital(loc_2(stateid('illinois'

N-grams	capital(loc_2(stateid('illinois'
	capital(loc_2(stateid('illinois'
	capital(loc_2(stateid('illinois'
	capital(loc_2(stateid(
	capital(loc_2(stateid('illinois'
	        loc_2(stateid(
	        loc_2(stateid('illinois'

Sentence 162)   BLEU: 0 (0.8571/0.6667/0.4/0)

Source	What is the capital of the state with the longest river
Ref 0	capital(loc_2(state(loc_1(longest(river(all
Output 0	capital(loc_2(state(**stateid(** longest(river(all
N-grams	capital(loc_2(state(stateid(longest(river(all capital(loc_2(state(longest(river(all capital(loc_2(longest(river(capital(loc_2(state(longest(river(all loc_2(state(river(all

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Sentence 163)   BLEU: 1 (1/1/1/1)

Source	What is the highest point in states bordering Georgia
Ref 0	highest(place(loc_2(state(next_to_2(stateid('georgia'
Output 0	highest(place(loc_2(state(next_to_2(stateid('georgia'

N-grams	highest(place(loc_2(state(next_to_2(stateid('georgia'
	highest(place(loc_2(state(next_to_2(stateid('georgia'
	highest(place(loc_2(state(next_to_2(stateid(
	highest(place(loc_2(state(next_to_2(stateid('georgia'
	highest(place(loc_2(state(next_to_2(stateid('georgia'
	        place(loc_2(state(next_to_2(stateid(
	        place(loc_2(state(
	        place(loc_2(state(next_to_2(
	            loc_2(state(next_to_2(
	            loc_2(state(next_to_2(stateid(
	                state(next_to_2(stateid('georgia'

Sentence 164)   BLEU: 1 (1/1/1/1)

Source	What states border New Hampshire
Ref 0	state(next_to_2(stateid('new hampshire'
Output 0	state(next_to_2(stateid('new hampshire'
N-grams	state(next_to_2(stateid('new hampshire' state(next_to_2(stateid('new hampshire' state(next_to_2(stateid('new state(next_to_2(stateid('new hampshire' state(next_to_2(stateid('new next_to_2(stateid(next_to_2(stateid('new next_to_2(stateid('new hampshire' stateid('new hampshire'

Sentence 165)   BLEU: 1 (1/1/1/1)

Source	What is the capital of Maryland
Ref 0	capital(loc_2(stateid('maryland'
Output 0	capital(loc_2(stateid('maryland'
N-grams	capital(loc_2(stateid('maryland' capital(loc_2(stateid('maryland' capital(loc_2(stateid('maryland' capital(loc_2(stateid(capital(loc_2(stateid('maryland' loc_2(stateid(loc_2(stateid('maryland'

Sentence 166)   BLEU: 0.6687 (0.8/0.75/0.6667/0.5)

Source	What state has the city Flint
Ref 0	state(loc_1(city(cityid('flint', _
Output 0	state(loc_1(city(cityid(**Flint**
N-grams	state(loc_1(city(cityid(Flint state(loc_1(city(cityid(state(loc_1(city(cityid(state(loc_1(city(state(loc_1(city(cityid(loc_1(city(loc_1(city(cityid(

Sentence 167)   BLEU: 0 (1/1/1/0)

Source	What is the population of Idaho
Ref 0	population_1(stateid('idaho'
Output 0	

N-grams	population_1(stateid('idaho'

N-grams	population_1(stateid('idaho' population_1(stateid('idaho' population_1(stateid(population_1(stateid('idaho' stateid('idaho'

Sentence 168)   **BLEU:** 1 (1/1/1/1)

Source	What is the longest river in Texas
Ref 0	longest(river(loc_2(stateid('texas'
Output 0	longest(river(loc_2(stateid('texas'

N-grams	longest(river(loc_2(stateid('texas'
	longest(river(loc_2(stateid('texas'
	longest(river(loc_2(stateid(
	longest(river(loc_2(stateid('texas'
	longest(river(loc_2(stateid(
	     river(loc_2(
	     river(loc_2(stateid(
	     river(loc_2(stateid('texas'
	        loc_2(stateid('texas'

Sentence 169)   **BLEU:** 0.6606 (0.8889/0.75/0.5714/0.5)

Source	What rivers flow through states that border the state with the largest population
Ref 0	river(traverse_2(state(next_to_2(largest_one(population_1(state(all
Output 0	river(traverse_2(**stateid(** state(next_to_2(largest_one(population_1(state(all

N-grams	river(traverse_2(stateid(state(next_to_2(largest_one(population_1(state(all
	river(traverse_2(state(next_to_2(largest_one(population_1(state(all
	river(traverse_2(state(next_to_2(largest_one(population_1(state(all
	          state(next_to_2(largest_one(population_1(state(
	          state(next_to_2(largest_one(population_1(
	             next_to_2(largest_one(population_1(state(all
	             next_to_2(largest_one(population_1(
	             next_to_2(largest_one(population_1(state(
	                largest_one(population_1(state(
	                largest_one(population_1(state(all

Sentence 170)   **BLEU:** 0 (0.8/0.25/0/0)

Source	What is the area of the Texas state
Ref 0	area_1(state(stateid('texas'
Output 0	area_1(stateid('texas' state(**all**
N-grams	area_1(stateid('texas' state(all area_1(stateid('texas' state(

stateid('texas'

Sentence 171)   **BLEU:** 1 (1/1/1/1)

Source	What states border Delaware
Ref 0	state(next_to_2(stateid('delaware'
Output 0	state(next_to_2(stateid('delaware'
N-grams	state(next_to_2(stateid('delaware' state(next_to_2(stateid('delaware' state(next_to_2(stateid('delaware' state(next_to_2(stateid(state(next_to_2(stateid('delaware' next_to_2(stateid(next_to_2(stateid('delaware'

Sentence 172)   **BLEU:** 1 (1/1/1/1)

Source	What is the capital of North Dakota
Ref 0	capital(loc_2(stateid('north dakota'
Output 0	capital(loc_2(stateid('north dakota'
N-grams	capital(loc_2(stateid('north dakota' capital(loc_2(stateid('north dakota' capital(loc_2(stateid('north capital(loc_2(stateid('north dakota' capital(loc_2(stateid('north loc_2(stateid(loc_2(stateid('north loc_2(stateid('north dakota' stateid('north dakota'

Sentence 173)   **BLEU:** 0 (0.6/0/0/0)

Source	What is the area of all the states combined
Ref 0	sum(area_1(state(all
Output 0	area_1(**stateid(** state(**combined** all
N-grams	area_1(stateid(state(combined all area_1(state(all

Sentence 174)   **BLEU:** 0.455 (0.8571/0.5/0.4/0.25)

Source	What is the longest river that does not run through Texas
Ref 0	longest(exclude(river(all , traverse_2(stateid('texas'
Output 0	longest(river(**loc_2(** , traverse_2(stateid('texas'
N-grams	longest(river(loc_2(, traverse_2(stateid('texas' longest(river(, traverse_2(stateid('texas'

	, traverse_2(stateid('texas'
	, traverse_2(stateid(
	, traverse_2(stateid('texas'
	traverse_2(stateid(
	traverse_2(stateid('texas'

Sentence 175)   **BLEU:** 1 (1/1/1/1)

Source	What is the highest point in Montana
Ref 0	highest(place(loc_2(stateid('montana'
Output 0	highest(place(loc_2(stateid('montana'

N-grams	highest(place(loc_2(stateid('montana'
	highest(place(loc_2(stateid('montana'
	highest(place(loc_2(stateid(
	highest(place(loc_2(stateid('montana'
	highest(place(loc_2(stateid(
	       place(loc_2(
	       place(loc_2(stateid(
	       place(loc_2(stateid('montana'
	          loc_2(stateid('montana'

Sentence 176)   **BLEU:** 0.7598 (0.8333/0.8/0.75/0.6667)

Source	How many rivers does Colorado have
Ref 0	count(river(loc_2(stateid('colorado'
Output 0	count(river(loc_2(stateid('colorado' **have**

N-grams	count(river(loc_2(stateid('colorado' have
	count(river(loc_2(stateid('colorado'
	count(river(loc_2(stateid(
	count(river(loc_2(stateid('colorado'
	count(river(loc_2(stateid(
	      river(loc_2(
	      river(loc_2(stateid(
	      river(loc_2(stateid('colorado'
	        loc_2(stateid('colorado'

Sentence 177)   **BLEU:** 0.6435 (0.8571/0.6667/0.6/0.5)

Source	What is the length of the longest river in the USA
Ref 0	len(longest(river(loc_2(countryid('usa'
Output 0	len(**stateid(** longest(river(loc_2(countryid('usa'

N-grams	len(stateid(longest(river(loc_2(countryid('usa'
	len(longest(river(loc_2(countryid('usa'
	          longest(river(loc_2(countryid(
	          longest(river(loc_2(countryid('usa'
	          longest(river(loc_2(countryid(

```
                      river( loc_2(
                 river( loc_2( countryid(
              river( loc_2( countryid( 'usa'
                     loc_2( countryid( 'usa'
```

Sentence 178)   BLEU: 0 (1/1/1/0)

Source	What is the area of Alaska
Ref 0	area_1(stateid('alaska'
Output 0	area_1(stateid('alaska'
N-grams	area_1(stateid('alaska' area_1(stateid('alaska' area_1(stateid(area_1(stateid('alaska' stateid('alaska'

Sentence 179)   BLEU: 0.6914 (1/0.8571/0.6667/0.4)

Source	How many states have cities named Austin
Ref 0	count(state(loc_1(city(cityid('austin', _
Output 0	count(state(loc_1(city(cityid(**cityid(** 'austin', _

N-grams	count(state(loc_1(city(cityid(cityid('austin', _
	count(state(loc_1(city(cityid(cityid('austin', _
	count(state(loc_1(city(cityid('austin', _
	count(state(loc_1(city(cityid('austin',
	count(state(loc_1(city('austin', _
	        state(loc_1(
	        state(loc_1(city(
	        state(loc_1(city(cityid(
	            loc_1(city(cityid(

Sentence 180)   BLEU: 0 (1/1/1/0)

Source	Where is Springfield
Ref 0	loc_1(cityid('springfield', _
Output 0	loc_1(cityid('springfield',
N-grams	loc_1(cityid('springfield', loc_1(cityid('springfield', loc_1(cityid(loc_1(cityid('springfield', cityid('springfield',

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Sentence 181)   BLEU: 0 (0.6/0.25/0/0)

Source	What state has the smallest urban population
Ref 0	smallest_one(population_1(state(all

Output 0	**smallest(** state(all **urban** population_1(
N-grams	smallest(state(all urban population_1(　　　　state(all　　　　population_1(　　　　state(all

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Sentence 182)   BLEU: 1 (1/1/1/1)

Source	What is the smallest city in Alaska
Ref 0	smallest(city(loc_2(stateid('alaska'
Output 0	smallest(city(loc_2(stateid('alaska'
N-grams	smallest(city(loc_2(stateid('alaska' smallest(city(loc_2(stateid('alaska' smallest(city(loc_2(stateid(smallest(city(loc_2(stateid('alaska' smallest(city(loc_2(stateid(　　　　city(loc_2(　　　　city(loc_2(stateid(　　　　city(loc_2(stateid('alaska' 　　　　　　loc_2(stateid('alaska'

Sentence 183)   BLEU: 0.4111 (0.75/0.5714/0.3333/0.2)

Source	What is the capital of the state with the largest population
Ref 0	capital(loc_2(largest_one(population_1(state(all
Output 0	capital(loc_2(**stateid(the** largest_one(population_1(state(all
N-grams	capital(loc_2(stateid(the largest_one(population_1(state(all capital(loc_2(　　　　largest_one(population_1(state(all capital(loc_2(　　　　largest_one(population_1(state(all 　　　　　　largest_one(population_1(state(　　　　　　largest_one(population_1(state(all 　　　　　　　　population_1(state(　　　　　　　　population_1(state(all

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Sentence 184)   BLEU: 0 (0.8/0.25/0/0)

Source	Which state has the most rivers running through it
Ref 0	most(state(traverse_1(river(all
Output 0	**Which** state(traverse_1(most(river(
N-grams	Which state(traverse_1(most(river(　　　　state(traverse_1(most(river(　　　　state(traverse_1(

Sentence 185)   BLEU: 0 (0.75/0.3333/0/0)

Source	What is the least populous state

Ref 0	smallest_one(population_1(state(all
Output 0	smallest_one(**populous** state(all
N-grams	smallest_one(populous state(all smallest_one(　　　　　state(all 　　　　　　　　　　　state(all

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Sentence 186)　　**BLEU:** 0 (0.6667/0/0/0)

Source	What length is the Mississippi
Ref 0	len(riverid('mississippi'
Output 0	len(**all** 'mississippi'
N-grams	len(all 'mississippi' len(　　'mississippi'

Sentence 187)　　**BLEU:** 0 (1/0.5/0.3333/0)

Source	How long is the Mississippi river
Ref 0	len(river(riverid('mississippi'
Output 0	len(riverid(river(**riverid(** 'mississippi'
N-grams	len(riverid(river(riverid('mississippi' len(riverid(river(riverid('mississippi' 　　　　　　river(riverid('mississippi' 　　　　　　river(riverid('mississippi'

Sentence 188)　　**BLEU:** 1 (1/1/1/1)

Source	What state that borders Texas has the highest population
Ref 0	largest_one(population_1(state(next_to_2(stateid('texas'
Output 0	largest_one(population_1(state(next_to_2(stateid('texas'
N-grams	largest_one(population_1(state(next_to_2(stateid('texas' largest_one(population_1(state(next_to_2(stateid('texas' largest_one(population_1(state(next_to_2(stateid('texas' largest_one(population_1(state(next_to_2(stateid(largest_one(population_1(state(next_to_2(　　　　　　population_1(state(next_to_2(stateid('texas' 　　　　　　population_1(state(next_to_2(　　　　　　population_1(state(next_to_2(stateid(　　　　　　　　state(next_to_2(stateid(　　　　　　　　state(next_to_2(stateid('texas'

Sentence 189)　　**BLEU:** 0 (0.5/0.3333/0/0)

Source	How many people live in Minneapolis Minnesota
Ref 0	population_1(cityid('minneapolis', 'mn'
Output 0	population_1(cityid(**Minneapolis 'minnesota'**

N-grams	population_1(cityid(Minneapolis 'minnesota' population_1(cityid(population_1(cityid(

Sentence 190)   **BLEU:** 0.5133 (0.7778/0.625/0.4286/0.3333)

Source	What states border the states with the most cities
Ref 0	state(next_to_2(most(state(loc_1(city(all
Output 0	state(next_to_2(**stateid(the** most(state(loc_1(city(all

N-grams	state(next_to_2(stateid(the most(state(loc_1(city(all
	state(next_to_2(most(state(loc_1(city(all
	state(next_to_2(most(state(loc_1(city(
	                              most(state(loc_1(city(all
	                              most(state(loc_1(city(
	                                    state(loc_1(
	                                    state(loc_1(city(
	                                    state(loc_1(city(all
	                                    loc_1(city(all

Sentence 191)   **BLEU:** 0 (0.25/0/0/0)

Source	What is the population of Boston Massachusetts
Ref 0	population_1(cityid('boston', 'ma'
Output 0	population_1(**stateid(Boston 'massachusetts'**
N-grams	population_1(stateid(Boston 'massachusetts' population_1(

Sentence 192)   **BLEU:** 1 (1/1/1/1)

Source	How many major cities are there in Oregon
Ref 0	count(major(city(loc_2(stateid('oregon'
Output 0	count(major(city(loc_2(stateid('oregon'

N-grams	count(major(city(loc_2(stateid('oregon'
	count(major(city(loc_2(stateid('oregon'
	count(major(city(loc_2(stateid('oregon'
	count(major(city(loc_2(stateid(
	count(major(city(loc_2(
	        major(city(loc_2(stateid('oregon'
	        major(city(loc_2(
	        major(city(loc_2(stateid(
	              city(loc_2(stateid(
	              city(loc_2(stateid('oregon'

Sentence 193)   **BLEU:** 0.6148 (0.7143/0.6667/0.6/0.5)

Source	What is the elevation of the highest point in the USA

Ref 0	elevation_1(highest(place(loc_2(countryid('usa'
Output 0	**elevation stateid(** highest(place(loc_2(countryid('usa'
N-grams	elevation stateid(highest(place(loc_2(countryid('usa' highest(place(loc_2(countryid('usa' highest(place(loc_2(countryid(highest(place(loc_2(countryid('usa' highest(place(loc_2(countryid(place(loc_2(place(loc_2(countryid(place(loc_2(countryid('usa' loc_2(countryid('usa'

Sentence 194)   BLEU: 0.5623 (0.875/0.5714/0.5/0.4)

Source	What are the populations of all the major cities in Montana
Ref 0	population_1(major(city(loc_2(stateid('montana'
Output 0	population_1(stateid(**all** major(city(loc_2(**stateid(** 'montana'
N-grams	population_1(stateid(all major(city(loc_2(stateid('montana' population_1(stateid(major(city(loc_2(stateid('montana' major(city(loc_2(stateid('montana' major(city(loc_2(major(city(loc_2(stateid(city(loc_2(city(loc_2(stateid(city(loc_2(stateid('montana' loc_2(stateid('montana'

Sentence 195)   BLEU: 0 (1/0.75/0.3333/0)

Source	How big is North Dakota
Ref 0	size(stateid('north dakota'
Output 0	size(stateid(**stateid(** 'north dakota'
N-grams	size(stateid(stateid('north dakota' size(stateid(stateid('north dakota' size(stateid(stateid('north dakota' 'north 'north dakota'

Sentence 196)   BLEU: 0.4111 (0.75/0.5714/0.3333/0.2)

Source	What states border states that the Ohio runs through
Ref 0	state(next_to_2(state(traverse_1(riverid('ohio'
Output 0	state(next_to_2(**stateid(that** state(traverse_1(riverid('ohio'
N-grams	state(next_to_2(stateid(that state(traverse_1(riverid('ohio'

state(next_to_2(	state(traverse_1(riverid('ohio'
state(next_to_2(	state(traverse_1(riverid('ohio'
	state(traverse_1(riverid(
	state(traverse_1(riverid('ohio'
	traverse_1(riverid(
	traverse_1(riverid('ohio'

Sentence 197)   BLEU: 0 (0.5556/0.25/0.1429/0)

Source	How many states border at least one other state
Ref 0	count(state(next_to_2(state(all
Output 0	count(state(next_to_2(**stateid(at least** all **other** state(
N-grams	count(state(next_to_2(stateid(at least all other state(
	count(state(next_to_2(all state(
	count(state(
	count(state(next_to_2(
	state(next_to_2(

Sentence 198)   BLEU: 1 (1/1/1/1)

Source	What states border Georgia
Ref 0	state(next_to_2(stateid('georgia'
Output 0	state(next_to_2(stateid('georgia'
N-grams	state(next_to_2(stateid('georgia'
	state(next_to_2(stateid('georgia'
	state(next_to_2(stateid('georgia'
	state(next_to_2(stateid(
	state(next_to_2(stateid('georgia'
	next_to_2(stateid(
	next_to_2(stateid('georgia'

Sentence 199)   BLEU: 0 (0.7143/0.3333/0.2/0)

Source	Where is the most populated area of New Mexico
Ref 0	largest_one(population_1(city(loc_2(stateid('new mexico'
Output 0	**loc_1(** loc_2(largest_one(**area_1(** stateid('new mexico'
N-grams	loc_1(loc_2(largest_one(area_1(stateid('new mexico'
	loc_2(largest_one(stateid('new mexico'
	stateid('new
	stateid('new mexico'
	'new mexico'

Sentence 200)   BLEU: 1 (1/1/1/1)

Source	What river runs through Virginia
Ref 0	river(traverse_2(stateid('virginia'

Output 0	river(traverse_2(stateid('virginia'
N-grams	river(traverse_2(stateid('virginia' river(traverse_2(stateid('virginia' river(traverse_2(stateid('virginia' river(traverse_2(stateid(river(traverse_2(stateid('virginia' 　　　traverse_2(stateid(　　　traverse_2(stateid('virginia'

Sentence 201)   BLEU: 1 (1/1/1/1)

Source	What is the capital of Indiana
Ref 0	capital(loc_2(stateid('indiana'
Output 0	capital(loc_2(stateid('indiana'
N-grams	capital(loc_2(stateid('indiana' capital(loc_2(stateid('indiana' capital(loc_2(stateid('indiana' capital(loc_2(stateid(capital(loc_2(stateid('indiana' 　　　loc_2(stateid(　　　loc_2(stateid('indiana'

Sentence 202)   BLEU: 0.6687 (0.8/0.75/0.6667/0.5)

Source	Which states does the Mississippi run through
Ref 0	state(traverse_1(riverid('mississippi'
Output 0	state(traverse_1(riverid('mississippi' **through**
N-grams	state(traverse_1(riverid('mississippi' through state(traverse_1(riverid('mississippi' state(traverse_1(riverid('mississippi' state(traverse_1(riverid(state(traverse_1(riverid('mississippi' 　　　traverse_1(riverid(　　　traverse_1(riverid('mississippi'

Sentence 203)   BLEU: 0 (0.7778/0.5/0.2857/0)

Source	How many people live in the biggest city in New York state
Ref 0	population_1(largest(city(loc_2(state(stateid('new york'
Output 0	population_1(**cityid(** largest(city(loc_2(stateid('new york' **state**
N-grams	population_1(cityid(largest(city(loc_2(stateid('new york' state population_1(　　　largest(city(loc_2(stateid('new york' 　　　　　　largest(city(　　　stateid('new 　　　　　　largest(city(loc_2(stateid('new york' 　　　　　　　　city(loc_2(　　　'new york'

Sentence 204)   **BLEU:** 1 (1/1/1/1)

Source	Which state has the most people
Ref 0	largest_one(population_1(state(all
Output 0	largest_one(population_1(state(all
N-grams	largest_one(population_1(state(all largest_one(population_1(state(all largest_one(population_1(state(all largest_one(population_1(state(largest_one(population_1(state(all population_1(state(population_1(state(all

Sentence 205)   **BLEU:** 0 (0.3333/0/0/0)

Source	What is the area of Seattle
Ref 0	area_1(cityid('seattle', _
Output 0	area_1(**stateid(Seattle**
N-grams	area_1(stateid(Seattle area_1(

Sentence 206)   **BLEU:** 0 (0.8/0.5/0.3333/0)

Source	What states are next to the Mississippi
Ref 0	state(next_to_2(stateid('mississippi'
Output 0	state(next_to_2(stateid(**the** 'mississippi'
N-grams	state(next_to_2(stateid(the 'mississippi' state(next_to_2(stateid('mississippi' state(next_to_2(state(next_to_2(stateid(next_to_2(stateid(

Sentence 207)   **BLEU:** 0 (0.8333/0.4/0.25/0)

Source	How long is the Rio Grande river
Ref 0	len(river(riverid('rio grande'
Output 0	len(riverid('rio grande' river(**all**
N-grams	len(riverid('rio grande' river(all len(riverid('rio grande' river(riverid('rio riverid('rio grande' 'rio grande'

Sentence 208)   **BLEU:** 0 (0.8/0.5/0/0)

Source	Show major cities in Colorado
Ref 0	major(city(loc_2(stateid('colorado'
Output 0	major(city(**Show** stateid('colorado'
N-grams	major(city(Show stateid('colorado' major(city(stateid('colorado' major(city(stateid('colorado'

Sentence 209)   **BLEU:** 0.5 (0.875/0.7143/0.5/0.2)

Source	What is the highest point of the state with the largest area
Ref 0	highest(place(loc_2(largest_one(area_1(state(all
Output 0	highest(place(loc_2(**stateid(** largest_one(area_1(state(all

N-grams	highest(place(loc_2(stateid(largest_one(area_1(state(all
	highest(place(loc_2(largest_one(area_1(state(all
	highest(place(largest_one(area_1(state(all
	highest(place(loc_2(largest_one(area_1(state(
	     place(loc_2(largest_one(area_1(state(all
	     area_1(state(
	     area_1(state(all

Sentence 210)   **BLEU:** 0 (0.25/0/0/0)

Source	What is the population of Seattle Washington
Ref 0	population_1(cityid('seattle', 'wa'
Output 0	population_1(**stateid(Seattle 'washington'**
N-grams	population_1(stateid(Seattle 'washington' population_1(

Sentence 211)   **BLEU:** 1 (1/1/1/1)

Source	What are the major cities in Vermont
Ref 0	major(city(loc_2(stateid('vermont'
Output 0	major(city(loc_2(stateid('vermont'

N-grams	major(city(loc_2(stateid('vermont'
	major(city(loc_2(stateid('vermont'
	major(city(loc_2(stateid(
	major(city(loc_2(stateid('vermont'
	major(city(loc_2(stateid(
	     city(loc_2(
	     city(loc_2(stateid(
	     city(loc_2(stateid('vermont'
	     loc_2(stateid('vermont'

Sentence 212)   **BLEU:** 1 (1/1/1/1)

Source	Which state has the greatest density
Ref 0	largest_one(density_1(state(all
Output 0	largest_one(density_1(state(all
N-grams	largest_one(density_1(state(all largest_one(density_1(state(all largest_one(density_1(state(all largest_one(density_1(state(largest_one(density_1(state(all density_1(state(density_1(state(all

Sentence 213)   BLEU: 1 (1/1/1/1)

Source	What is the area of South Carolina
Ref 0	area_1(stateid('south carolina'
Output 0	area_1(stateid('south carolina'
N-grams	area_1(stateid('south carolina' area_1(stateid('south carolina' area_1(stateid('south carolina' area_1(stateid('south area_1(stateid('south carolina' stateid('south stateid('south carolina'

Sentence 214)   BLEU: 1 (1/1/1/1)

Source	What is the biggest city in Georgia
Ref 0	largest(city(loc_2(stateid('georgia'
Output 0	largest(city(loc_2(stateid('georgia'
N-grams	largest(city(loc_2(stateid('georgia' largest(city(loc_2(stateid('georgia' largest(city(loc_2(stateid(largest(city(loc_2(stateid('georgia' largest(city(loc_2(stateid(city(loc_2(city(loc_2(stateid(city(loc_2(stateid('georgia' loc_2(stateid('georgia'

Sentence 215)   BLEU: 1 (1/1/1/1)

Source	What is the longest river that flows through a state that borders Indiana
Ref 0	longest(river(traverse_2(state(next_to_2(stateid('indiana'
Output 0	longest(river(traverse_2(state(next_to_2(stateid('indiana'
N-grams	

longest(river(traverse_2(state(next_to_2(stateid('indiana'
longest(river(traverse_2(state(next_to_2(stateid('indiana'
longest(river(traverse_2(state(next_to_2(stateid(
longest(river(traverse_2(state(next_to_2(stateid('indiana'
longest(river(traverse_2(state(next_to_2(stateid('indiana'
river(traverse_2(state(next_to_2(stateid(
river(traverse_2(state(
river(traverse_2(state(next_to_2(
traverse_2(state(next_to_2(
traverse_2(state(next_to_2(stateid(
state(next_to_2(stateid('indiana'

Sentence 216)   **BLEU:** 0 (1/1/1/0)

Source	What is the biggest state
Ref 0	largest(state(all
Output 0	largest(state(all
N-grams	largest(state(all largest(state(all largest(state(largest(state(all state(all

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Sentence 217)   **BLEU:** 0 (0.5714/0.3333/0.2/0)

Source	What is the area of the state with the capital Albany
Ref 0	area_1(state(loc_1(capital(cityid('albany', _
Output 0	area_1(**stateid(loc_2(** state(loc_1(capital(**Albany**
N-grams	area_1(stateid(loc_2(state(loc_1(capital(Albany area_1(state(loc_1(capital(state(loc_1(state(loc_1(capital(loc_1(capital(

Sentence 218)   **BLEU:** 0 (0.75/0.6667/0.5/0)

Source	How many people live in San Francisco
Ref 0	population_1(cityid('san francisco', _
Output 0	population_1(cityid('san **Francisco**
N-grams	population_1(cityid('san Francisco population_1(cityid('san population_1(cityid(population_1(cityid('san cityid('san

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Sentence 219)   **BLEU:** 1 (1/1/1/1)

Source	What is the capital of New York
Ref 0	capital(loc_2(stateid('new york'
Output 0	capital(loc_2(stateid('new york'
N-grams	capital(loc_2(stateid('new york' capital(loc_2(stateid('new york' capital(loc_2(stateid('new capital(loc_2(stateid('new york' capital(loc_2(stateid('new loc_2(stateid(loc_2(stateid('new loc_2(stateid('new york' stateid('new york'

Sentence 220)   BLEU: 0 (1/1/1/0)

Source	What is the population of Maine
Ref 0	population_1(stateid('maine'
Output 0	population_1(stateid('maine'
N-grams	population_1(stateid('maine' population_1(stateid('maine' population_1(stateid(population_1(stateid('maine' stateid('maine'

Sentence 221)   BLEU: 0 (0.6667/0.4/0.25/0)

Source	How many people are in the state of Nevada
Ref 0	population_1(state(stateid('nevada'
Output 0	population_1(**cityid(loc_2(** state(stateid('nevada'
N-grams	population_1(cityid(loc_2(state(stateid('nevada' population_1(state(stateid('nevada' state(stateid(state(stateid('nevada' stateid('nevada'

Sentence 222)   BLEU: 0.4671 (1/0.7143/0.3333/0.2)

Source	What is the capital of the state that borders the state that borders Texas
Ref 0	capital(loc_2(state(next_to_2(state(next_to_2(stateid('texas'
Output 0	state(next_to_2(state(next_to_2(capital(loc_2(stateid('texas'
N-grams	state(next_to_2(state(next_to_2(capital(loc_2(stateid('texas' state(next_to_2(state(next_to_2(capital(loc_2(stateid('texas' state(next_to_2(state(next_to_2(capital(loc_2(stateid('texas' state(next_to_2(state(

state(next_to_2(state(next_to_2(
        next_to_2(state(
        next_to_2(state(next_to_2(

Sentence 223)   **BLEU:** 0.7598 (0.8333/0.8/0.75/0.6667)

Source	Which state is Mount McKinley in
Ref 0	state(loc_1(placeid('mount mckinley'
Output 0	state(loc_1(placeid('mount mckinley' **in**

N-grams	state(loc_1(placeid('mount mckinley' in
	state(loc_1(placeid('mount mckinley'
	state(loc_1(placeid('mount
	state(loc_1(placeid('mount mckinley'
	state(loc_1(placeid('mount
	        loc_1(placeid(
	        loc_1(placeid('mount
	        loc_1(placeid('mount mckinley'
	                placeid('mount mckinley'

Sentence 224)   **BLEU:** 0.4889 (0.8571/0.6667/0.4/0.25)

Source	What major cities are located in Pennsylvania
Ref 0	major(city(loc_2(stateid('pennsylvania'
Output 0	major(city(loc_2(stateid(**located stateid(** 'pennsylvania'

N-grams	major(city(loc_2(stateid(located stateid('pennsylvania'
	major(city(loc_2(stateid(stateid('pennsylvania'
	major(city(loc_2(stateid('pennsylvania'
	major(city(loc_2(
	major(city(loc_2(stateid(
	        city(loc_2(
	        city(loc_2(stateid(

Sentence 225)   **BLEU:** 0 (1/1/1/0)

Source	What is the population of Montana
Ref 0	population_1(stateid('montana'
Output 0	population_1(stateid('montana'
N-grams	population_1(stateid('montana' population_1(stateid('montana' population_1(stateid(population_1(stateid('montana' stateid('montana'

Sentence 226)   **BLEU:** 0 (0.625/0.4286/0.1667/0)

Source	What is the largest state traversed by the Mississippi river

Ref 0	largest(state(traverse_1(river(riverid('mississippi'
Output 0	largest(state(**all traversed by** river(riverid('mississippi'

N-grams	largest(state(all traversed by river(riverid('mississippi'
	 largest(state(river(riverid('mississippi'
	 largest(state(river(riverid(
	                 river(riverid('mississippi'
	                    riverid('mississippi'

Sentence 227)   BLEU: 1 (1/1/1/1)

Source	What is the longest river in the states that border Nebraska
Ref 0	longest(river(loc_2(state(next_to_2(stateid('nebraska'
Output 0	longest(river(loc_2(state(next_to_2(stateid('nebraska'

N-grams	longest(river(loc_2(state(next_to_2(stateid('nebraska'
	 longest(river(loc_2(state(next_to_2(stateid('nebraska'
	 longest(river(loc_2(state(next_to_2(stateid(
	 longest(river(loc_2(state(next_to_2(stateid('nebraska'
	 longest(river(loc_2(state(next_to_2(stateid('nebraska'
	        river(loc_2(state(next_to_2(stateid(
	        river(loc_2(state(
	        river(loc_2(state(next_to_2(
	            loc_2(state(next_to_2(
	            loc_2(state(next_to_2(stateid(
	                state(next_to_2(stateid('nebraska'

Sentence 228)   BLEU: 1 (1/1/1/1)

Source	What is the biggest city in Oregon
Ref 0	largest(city(loc_2(stateid('oregon'
Output 0	largest(city(loc_2(stateid('oregon'

N-grams	largest(city(loc_2(stateid('oregon'
	 largest(city(loc_2(stateid('oregon'
	 largest(city(loc_2(stateid(
	 largest(city(loc_2(stateid('oregon'
	 largest(city(loc_2(stateid(
	        city(loc_2(
	        city(loc_2(stateid(
	        city(loc_2(stateid('oregon'
	            loc_2(stateid('oregon'

Sentence 229)   BLEU: 1 (1/1/1/1)

Source	What state is Austin in
Ref 0	state(loc_1(cityid('austin', _
Output 0	state(loc_1(cityid('austin', _

N-grams	state(loc_1(cityid('austin', _
	state(loc_1(cityid('austin', _
	state(loc_1(cityid('austin',
	state(loc_1(cityid('austin', _
	state(loc_1(cityid('austin',
	loc_1(cityid(
	loc_1(cityid('austin',
	loc_1(cityid('austin', _
	cityid('austin', _

Sentence 230)   BLEU: 0.7598 (0.8333/0.8/0.75/0.6667)

Source	How many rivers does Alaska have
Ref 0	count(river(loc_2(stateid('alaska'
Output 0	count(river(loc_2(stateid('alaska' **have**
N-grams	count(river(loc_2(stateid('alaska' have
	count(river(loc_2(stateid('alaska'
	count(river(loc_2(stateid(
	count(river(loc_2(stateid('alaska'
	count(river(loc_2(stateid(
	river(loc_2(
	river(loc_2(stateid(
	river(loc_2(stateid('alaska'
	loc_2(stateid('alaska'

Sentence 231)   BLEU: 0.3799 (0.7/0.5556/0.375/0.1429)

Source	Which is the lowest point of the states that the Mississippi runs through
Ref 0	lowest(place(loc_2(state(traverse_1(riverid('mississippi'
Output 0	lowest(place(loc_2(**stateid(_ that** state(traverse_1(riverid('mississippi'
N-grams	lowest(place(loc_2(stateid(_ that state(traverse_1(riverid('mississippi' state(traverse_1(riverid('mississippi'
	lowest(place(loc_2(state(traverse_1(riverid('mississippi'
	lowest(place(state(traverse_1(riverid('mississippi'
	lowest(place(loc_2(state(traverse_1(riverid(
	place(loc_2(state(traverse_1(riverid('mississippi'
	traverse_1(riverid(
	traverse_1(riverid('mississippi'

Sentence 232)   BLEU: 0 (0.25/0/0/0)

Source	Which state has the biggest population
Ref 0	largest_one(population_1(state(all
Output 0	state(**loc_1(largest(population**
N-grams	state(loc_1(largest(population
	state(

Sentence 233)   BLEU: 0 (0.5/0/0/0)

Source	Which states border no other states
Ref 0	exclude(state(all , next_to_2(state(all
Output 0	state(next_to_2(**stateid(no other** state(
N-grams	state(next_to_2(stateid(no other state(state(next_to_2(state(

Sentence 234)   BLEU: 1 (1/1/1/1)

Source	What is the longest river in California
Ref 0	longest(river(loc_2(stateid('california'
Output 0	longest(river(loc_2(stateid('california'

N-grams	longest(river(loc_2(stateid('california'
	longest(river(loc_2(stateid('california'
	longest(river(loc_2(stateid(
	longest(river(loc_2(stateid('california'
	longest(river(loc_2(stateid(
	        river(loc_2(
	        river(loc_2(stateid(
	        river(loc_2(stateid('california'
	                loc_2(stateid('california'

Sentence 235)   BLEU: 0 (1/1/1/0)

Source	Where is Massachusetts
Ref 0	loc_1(stateid('massachusetts'
Output 0	loc_1(stateid('massachusetts'
N-grams	loc_1(stateid('massachusetts' loc_1(stateid('massachusetts' loc_1(stateid(loc_1(stateid('massachusetts' stateid('massachusetts'

Sentence 236)   BLEU: 0 (1/1/1/0)

Source	What is the longest river
Ref 0	longest(river(all
Output 0	longest(river(all
N-grams	longest(river(all longest(river(all longest(river(longest(river(all river(all

---

Sentence 237)   **BLEU:** 0 (0.3333/0.2/0/0)

Source	Name all the lakes of US
Ref 0	lake(loc_2(countryid('usa'
Output 0	**Name all** lake(loc_2(**stateid(US**
N-grams	Name all lake(loc_2(stateid(US lake(loc_2(lake(loc_2(

Sentence 238)   **BLEU:** 0.4463 (0.8889/0.625/0.4286/0.1667)

Source	What states in the United States have a city of Springfield
Ref 0	intersection(state(loc_2(countryid('usa' , loc_1(city(cityid('springfield', _
Output 0	state(loc_1(city(cityid('springfield', loc_2(countryid('usa' **What**
N-grams	state(loc_1(city(cityid('springfield', loc_2(countryid('usa' What state(loc_1(city(cityid('springfield', loc_2(countryid('usa' loc_1(city(cityid('springfield', loc_2(countryid(loc_1(city(cityid(loc_2(countryid('usa' loc_1(city(cityid('springfield', countryid('usa' city(cityid(city(cityid('springfield',

Sentence 239)   **BLEU:** 0.7598 (0.8333/0.8/0.75/0.6667)

Source	What river traverses the most states
Ref 0	most(river(traverse_2(state(all
Output 0	**What** most(river(traverse_2(state(all
N-grams	What most(river(traverse_2(state(all most(river(traverse_2(state(all most(river(traverse_2(state(most(river(traverse_2(state(all most(river(traverse_2(state(river(traverse_2(river(traverse_2(state(river(traverse_2(state(all traverse_2(state(all

Sentence 240)   **BLEU:** 0 (0.6667/0.5/0/0)

Source	How many people live in Riverside
Ref 0	population_1(cityid('riverside', _
Output 0	population_1(cityid(**Riverside**
N-grams	population_1(cityid(Riverside population_1(cityid(population_1(cityid(

Sentence 241) **BLEU:** 1 (1/1/1/1)

Source	What is the capital of the largest state
Ref 0	capital(loc_2(largest(state(all
Output 0	capital(loc_2(largest(state(all

N-grams

capital(loc_2(largest(state(all
capital(loc_2(largest(state(all
capital(loc_2(largest(state(
capital(loc_2(largest(state(all
capital(loc_2(largest(state(
      loc_2(largest(
      loc_2(largest(state(
      loc_2(largest(state(all
         largest(state(all

Sentence 242) **BLEU:** 0 (0.5/0.3333/0/0)

Source	Which is the smallest state
Ref 0	smallest(state(all
Output 0	smallest(state(**Which _**

N-grams

smallest(state(Which _
smallest(state(
smallest(state(

Sentence 243) **BLEU:** 1 (1/1/1/1)

Source	What is the population of the capital of the smallest state
Ref 0	population_1(capital(loc_2(smallest(state(all
Output 0	population_1(capital(loc_2(smallest(state(all

N-grams

population_1(capital(loc_2(smallest(state(all
population_1(capital(loc_2(smallest(state(all
population_1(capital(loc_2(smallest(state(all
population_1(capital(loc_2(smallest(state(
population_1(capital(loc_2(smallest(
      capital(loc_2(smallest(state(all
      capital(loc_2(smallest(
      capital(loc_2(smallest(state(
         loc_2(smallest(state(
         loc_2(smallest(state(all

Sentence 244) **BLEU:** 0 (0.6667/0.2/0/0)

Source	What is the combined area of all 50 states
Ref 0	sum(area_1(state(all
Output 0	sum(area_1(**stateid(** all **50** state(

N-grams	sum(area_1(stateid(all 50 state(
	sum(area_1(all state(
	sum(area_1(

Sentence 245)   BLEU: 0 (0.6/0.5/0.3333/0)

Source	What rivers run through West Virginia
Ref 0	river(traverse_2(stateid('west virginia'
Output 0	river(traverse_2(stateid(**West 'virginia'**
N-grams	river(traverse_2(stateid(West 'virginia' river(traverse_2(stateid(river(traverse_2(river(traverse_2(stateid(traverse_2(stateid(

Sentence 246)   BLEU: 0.7598 (0.8333/0.8/0.75/0.6667)

Source	Which states does the Missouri river run through
Ref 0	state(traverse_1(river(riverid('missouri'
Output 0	state(traverse_1(river(riverid('missouri' **through**

N-grams	state(traverse_1(river(riverid('missouri' through
	state(traverse_1(river(riverid('missouri'
	state(traverse_1(river(riverid(
	state(traverse_1(river(riverid('missouri'
	state(traverse_1(river(riverid(
	     traverse_1(river(
	     traverse_1(river(riverid(
	     traverse_1(river(riverid('missouri'
	          river(riverid('missouri'

Sentence 247)   BLEU: 1 (1/1/1/1)

Source	Which state borders most states
Ref 0	most(state(next_to_2(state(all
Output 0	most(state(next_to_2(state(all

N-grams	most(state(next_to_2(state(all
	most(state(next_to_2(state(all
	most(state(next_to_2(state(
	most(state(next_to_2(state(all
	most(state(next_to_2(state(
	     state(next_to_2(
	     state(next_to_2(state(
	     state(next_to_2(state(all
	          next_to_2(state(all

Sentence 248)   BLEU: 0.6148 (0.7143/0.6667/0.6/0.5)

Source	What cities in Texas have the highest number of citizens
Ref 0	largest_one(population_1(city(loc_2(stateid('texas'
Output 0	**highest(number** population_1(city(loc_2(stateid('texas'
N-grams	highest(number population_1(city(loc_2(stateid('texas' population_1(city(loc_2(stateid('texas' population_1(city(loc_2(stateid(population_1(city(loc_2(stateid('texas' population_1(city(loc_2(stateid(city(loc_2(city(loc_2(stateid(city(loc_2(stateid('texas' loc_2(stateid('texas'

Sentence 249)   BLEU: 0.5411 (0.75/0.5714/0.5/0.4)

Source	What state is the state with the most rivers
Ref 0	state(most(state(loc_1(river(all
Output 0	state(**next_to_2(stateid(** most(state(loc_1(river(all
N-grams	state(next_to_2(stateid(most(state(loc_1(river(all state(most(state(loc_1(river(all most(state(loc_1(river(most(state(loc_1(river(all most(state(loc_1(river(state(loc_1(state(loc_1(river(state(loc_1(river(all loc_1(river(all

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Sentence 250)   BLEU: 1 (1/1/1/1)

Source	What state borders New York
Ref 0	state(next_to_2(stateid('new york'
Output 0	state(next_to_2(stateid('new york'
N-grams	state(next_to_2(stateid('new york' state(next_to_2(stateid('new york' state(next_to_2(stateid('new state(next_to_2(stateid('new york' state(next_to_2(stateid('new next_to_2(stateid(next_to_2(stateid('new next_to_2(stateid('new york' stateid('new york'

Sentence 251)   BLEU: 0 (0.6/0.5/0.3333/0)

Source	What is the longest river in the US
Ref 0	longest(river(loc_2(countryid('usa'
Output 0	longest(river(loc_2(**stateid(US**
N-grams	longest(river(loc_2(stateid(US longest(river(loc_2(longest(river(longest(river(loc_2(river(loc_2(

Sentence 252)   **BLEU:** 1 (1/1/1/1)

Source	What states border Arkansas
Ref 0	state(next_to_2(stateid('arkansas'
Output 0	state(next_to_2(stateid('arkansas'

N-grams	state(next_to_2(stateid('arkansas'
	state(next_to_2(stateid('arkansas'
	state(next_to_2(stateid('arkansas'
	state(next_to_2(stateid(
	state(next_to_2(stateid('arkansas'
	    next_to_2(stateid(
	    next_to_2(stateid('arkansas'

Sentence 253)   **BLEU:** 1 (1/1/1/1)

Source	What state has the lowest population density
Ref 0	smallest_one(density_1(state(all
Output 0	smallest_one(density_1(state(all

N-grams	smallest_one(density_1(state(all
	smallest_one(density_1(state(all
	smallest_one(density_1(state(all
	smallest_one(density_1(state(
	smallest_one(density_1(state(all
	      density_1(state(
	      density_1(state(all

Sentence 254)   **BLEU:** 0 (0.3333/0.2/0/0)

Source	What is the maximum elevation of San Francisco
Ref 0	highest(place(loc_2(cityid('san francisco', _
Output 0	**maximum** place(loc_2(**stateid(San Francisco**

N-grams	maximum place(loc_2(stateid(San Francisco
	      place(loc_2(
	      place(loc_2(

Sentence 255)   BLEU: 0.7071 (1/0.8333/0.6/0.5)

Source	How many states have a city named Springfield
Ref 0	count(state(loc_1(city(cityid('springfield', _
Output 0	count(state(loc_1(city(cityid(**cityid(** 'springfield',

N-grams	count(state(loc_1(city(cityid(cityid('springfield',
	count(state(loc_1(city(cityid(cityid('springfield',
	count(state(loc_1(city('springfield',
	count(state(loc_1(city(cityid(
	count(state(loc_1(city(
	        state(loc_1(
	        state(loc_1(city(
	        state(loc_1(city(cityid(
	            loc_1(city(cityid(

Sentence 256)   BLEU: 1 (1/1/1/1)

Source	What are the major cities in Oklahoma
Ref 0	major(city(loc_2(stateid('oklahoma'
Output 0	major(city(loc_2(stateid('oklahoma'

N-grams	major(city(loc_2(stateid('oklahoma'
	major(city(loc_2(stateid('oklahoma'
	major(city(loc_2(stateid(
	major(city(loc_2(stateid('oklahoma'
	major(city(loc_2(stateid(
	        city(loc_2(
	        city(loc_2(stateid(
	        city(loc_2(stateid('oklahoma'
	            loc_2(stateid('oklahoma'

Sentence 257)   BLEU: 0 (0.8/0.5/0.3333/0)

Source	What is the height of Mount McKinley
Ref 0	elevation_1(placeid('mount mckinley'
Output 0	elevation_1(**stateid(** placeid('mount mckinley'

N-grams	elevation_1(stateid(placeid('mount mckinley'
	elevation_1(placeid('mount mckinley'
	                placeid('mount
	                placeid('mount mckinley'
	                    'mount mckinley'

Sentence 258)   BLEU: 0 (0.4/0.25/0/0)

Source	How many states are there
Ref 0	count(state(all
Output 0	

	count(state(**loc_2(stateid(there**
N-grams	count(state(loc_2(stateid(there count(state(count(state(

Sentence 259)   BLEU: 0.5946 (0.875/0.7143/0.5/0.4)

Source	What is the highest point in the state with the most rivers
Ref 0	highest(place(loc_2(most(state(traverse_1(river(all
Output 0	highest(place(loc_2(most(state(**loc_1(** river(all

N-grams	highest(place(loc_2(most(state(loc_1(river(all
	highest(place(loc_2(most(state(river(all
	highest(place(loc_2(most(river(all
	highest(place(loc_2(most(state(
	highest(place(loc_2(most(
	          place(loc_2(
	          place(loc_2(most(
	          place(loc_2(most(state(
	                 loc_2(most(state(

Sentence 260)   BLEU: 1 (1/1/1/1)

Source	Which rivers run through states bordering New Mexico
Ref 0	river(traverse_2(state(next_to_2(stateid('new mexico'
Output 0	river(traverse_2(state(next_to_2(stateid('new mexico'

N-grams	river(traverse_2(state(next_to_2(stateid('new mexico'
	river(traverse_2(state(next_to_2(stateid('new mexico'
	river(traverse_2(state(next_to_2(stateid('new
	river(traverse_2(state(next_to_2(stateid('new mexico'
	river(traverse_2(state(next_to_2(stateid('new mexico'
	        traverse_2(state(next_to_2(stateid('new
	        traverse_2(state(next_to_2(
	        traverse_2(state(next_to_2(stateid(
	                state(next_to_2(stateid(
	                state(next_to_2(stateid('new
	                        next_to_2(stateid('new mexico'

Sentence 261)   BLEU: 0.7598 (0.8333/0.8/0.75/0.6667)

Source	What are the major lakes in United States
Ref 0	major(lake(loc_2(countryid('usa'
Output 0	**What** major(lake(loc_2(countryid('usa'

N-grams	What major(lake(loc_2(countryid('usa'
	        major(lake(loc_2(countryid('usa'
	        major(lake(loc_2(countryid(

major(lake(loc_2(countryid('usa'
major(lake(loc_2(countryid(
            lake(loc_2(
            lake(loc_2(countryid(
            lake(loc_2(countryid('usa'
                loc_2(countryid('usa'

Sentence 262)   **BLEU:** 0 (0.6667/0.4/0/0)

Source	Which river goes through the most states
Ref 0	most(river(traverse_2(state(all
Output 0	most(river(**goes traverse_1(** state(all
N-grams	most(river(goes traverse_1(state(all most(river(state(all most(river(state(all

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Sentence 263)   **BLEU:** 0 (0.7143/0.3333/0/0)

Source	What is the smallest state that borders the most states
Ref 0	smallest(most(state(next_to_2(state(all
Output 0	smallest(state(next_to_2(**stateid(the** most(state(
N-grams	smallest(state(next_to_2(stateid(the most(state(smallest(state(next_to_2(most(state(state(next_to_2(most(state(

Sentence 264)   **BLEU:** 1 (1/1/1/1)

Source	What states border states that border Colorado
Ref 0	state(next_to_2(state(next_to_2(stateid('colorado'
Output 0	state(next_to_2(state(next_to_2(stateid('colorado'

N-grams	state(next_to_2(state(next_to_2(stateid('colorado'
	state(next_to_2(state(next_to_2(stateid('colorado'
	state(next_to_2(state(next_to_2(stateid('colorado'
	state(next_to_2(state(next_to_2(stateid(
	state(next_to_2(state(next_to_2(
	       next_to_2(state(next_to_2(stateid('colorado'
	       next_to_2(state(next_to_2(
	       next_to_2(state(next_to_2(stateid(
	               state(next_to_2(stateid(
	               state(next_to_2(stateid('colorado'

Sentence 265)   **BLEU:** 0.7598 (0.8333/0.8/0.75/0.6667)

Source	What are the major cities of the United States
Ref 0	major(city(loc_2(countryid('usa'

Output 0	**What** major(city(loc_2(countryid('usa'

N-grams	What major(city(loc_2(countryid('usa'
	    major(city(loc_2(countryid('usa'
	    major(city(loc_2(countryid(
	    major(city(loc_2(countryid('usa'
	    major(city(loc_2(countryid(
	        city(loc_2(
	        city(loc_2(countryid(
	        city(loc_2(countryid('usa'
	            loc_2(countryid('usa'

Sentence 266)   **BLEU:** 0.8091 (0.8571/0.8333/0.8/0.75)

Source	What states have a city named Austin
Ref 0	state(loc_1(city(cityid('austin', _
Output 0	**What** state(loc_1(city(cityid('austin', _

N-grams	What state(loc_1(city(cityid('austin', _
	    state(loc_1(city(cityid('austin', _
	    state(loc_1(city(cityid('austin', _
	    state(loc_1(city(cityid('austin',
	    state(loc_1(city(cityid(
	        loc_1(city(cityid('austin', _
	        loc_1(city(cityid(
	        loc_1(city(cityid('austin',
	            city(cityid('austin',
	            city(cityid('austin', _

Sentence 267)   **BLEU:** 0.8091 (0.8571/0.8333/0.8/0.75)

Source	What state has the most major cities
Ref 0	most(state(loc_1(major(city(all
Output 0	**What** most(state(loc_1(major(city(all

N-grams	What most(state(loc_1(major(city(all
	    most(state(loc_1(major(city(all
	    most(state(loc_1(major(city(all
	    most(state(loc_1(major(city(
	    most(state(loc_1(major(
	        state(loc_1(major(city(all
	        state(loc_1(major(
	        state(loc_1(major(city(
	            loc_1(major(city(
	            loc_1(major(city(all

Sentence 268)   **BLEU:** 0 (0.5714/0.3333/0.2/0)

Source	What is the population density in the state with capital Austin

Ref 0	density_1(state(loc_1(capital(cityid('austin', _
Output 0	density_1(**stateid(loc_2(** state(loc_1(capital(**Austin**

N-grams	density_1(stateid(loc_2(state(loc_1(capital(Austin
	density_1(state(loc_1(capital(
	                state(loc_1(
	                state(loc_1(capital(
	                     loc_1(capital(

Sentence 269)   **BLEU:** 1 (1/1/1/1)

Source	What state has the largest population
Ref 0	largest_one(population_1(state(all
Output 0	largest_one(population_1(state(all

N-grams	largest_one(population_1(state(all
	largest_one(population_1(state(all
	largest_one(population_1(state(all
	largest_one(population_1(state(
	largest_one(population_1(state(all
	              population_1(state(
	              population_1(state(all

Sentence 270)   **BLEU:** 0 (0.3333/0/0/0)

Source	What is the population of Denver
Ref 0	population_1(cityid('denver', _
Output 0	population_1(**stateid(Denver**
N-grams	population_1(stateid(Denver population_1(

Sentence 271)   **BLEU:** 0 (0.6/0.25/0/0)

Source	What state has the largest urban population
Ref 0	largest_one(population_1(state(all
Output 0	**largest(** state(all **urban** population_1(

N-grams	largest(state(all urban population_1(
	        state(all population_1(
	        state(all

Sentence 272)   **BLEU:** 1 (1/1/1/1)

Source	How many rivers are in New York
Ref 0	count(river(loc_2(stateid('new york'
Output 0	count(river(loc_2(stateid('new york'
N-grams	count(river(loc_2(stateid('new york'

count(river(loc_2(stateid('new york'
count(river(loc_2(stateid('new york'
count(river(loc_2(stateid('new
count(river(loc_2(stateid(
    river(loc_2(stateid('new york'
    river(loc_2(stateid(
    river(loc_2(stateid('new
      loc_2(stateid('new
      loc_2(stateid('new york'

Sentence 273)   BLEU: 0.3357 (0.8/0.4444/0.25/0.1429)

Source	How many states in the US does the shortest river run through
Ref 0	count(intersection(state(loc_2(countryid('usa' ,traverse_1(shortest(river(all
Output 0	count(state(loc_2(countryid('usa' **How loc_2(** shortest(river(**traverse_2(**

N-grams	count(state(loc_2(countryid('usa' How loc_2(shortest(river(traverse_2(
	count(state(loc_2(countryid('usa' shortest(river(
	  state(loc_2(countryid('usa' shortest(river(
	  state(loc_2(countryid(
	  state(loc_2(countryid('usa'
	    loc_2(countryid(
	    loc_2(countryid('usa'

Sentence 274)   BLEU: 0 (1/1/1/0)

Source	What is the population of Maryland
Ref 0	population_1(stateid('maryland'
Output 0	population_1(stateid('maryland'
N-grams	population_1(stateid('maryland' population_1(stateid('maryland' population_1(stateid(population_1(stateid('maryland' stateid('maryland'

Sentence 275)   BLEU: 0 (0.75/0.6667/0.5/0)

Source	Which is the shortest river
Ref 0	shortest(river(all
Output 0	**Which** shortest(river(all

N-grams	Which shortest(river(all
	  shortest(river(all
	  shortest(river(
	  shortest(river(all
	    river(all

Sentence 276)   BLEU: 0 (1/1/1/0)

Source	Where is Portland
Ref 0	loc_1(cityid('portland', _
Output 0	loc_1(cityid('portland',
N-grams	loc_1(cityid('portland', loc_1(cityid('portland', loc_1(cityid(loc_1(cityid('portland', cityid('portland',

Sentence 277)   BLEU: 1 (1/1/1/1)

Source	What is the highest point in Kansas
Ref 0	highest(place(loc_2(stateid('kansas'
Output 0	highest(place(loc_2(stateid('kansas'

N-grams	highest(place(loc_2(stateid('kansas'
	highest(place(loc_2(stateid('kansas'
	highest(place(loc_2(stateid(
	highest(place(loc_2(stateid('kansas'
	highest(place(loc_2(stateid(
	     place(loc_2(
	     place(loc_2(stateid(
	     place(loc_2(stateid('kansas'
	          loc_2(stateid('kansas'

Sentence 278)   BLEU: 1 (1/1/1/1)

Source	What rivers flow through Missouri
Ref 0	river(traverse_2(stateid('missouri'
Output 0	river(traverse_2(stateid('missouri'

N-grams	river(traverse_2(stateid('missouri'
	river(traverse_2(stateid('missouri'
	river(traverse_2(stateid('missouri'
	river(traverse_2(stateid(
	river(traverse_2(stateid('missouri'
	     traverse_2(stateid(
	     traverse_2(stateid('missouri'

Sentence 279)   BLEU: 0.4111 (0.5714/0.5/0.4/0.25)

Source	What are the states through which the longest river runs
Ref 0	state(traverse_1(longest(river(all
Output 0	state(traverse_1(longest(river(**loc_2(stateid(runs**
N-grams	state(traverse_1(longest(river(loc_2(stateid(runs

state(traverse_1(longest(river(
state(traverse_1(longest(river(
state(traverse_1(longest(
state(traverse_1(longest(river(
traverse_1(longest(
traverse_1(longest(river(