

COMP 6751 Natural Language Analysis

Challenge Output Report of Project 2:

Developing Context Free Grammar

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Expectations of originality:

I, Md Sakib Ullah Sourav (student id 40264066), certify that this submission is my original work and meets the Faculty's Expectations of Originality.

Date: October 15, 2023

The challenge data are:

1. John's heart rate was greater than 90 beats/minute on Wednesday after he ate an apple.
2. The apple rolled 5 meters from the fridge to the office in 6 seconds last Monday and John ate it.
3. Sadly, the temperature in the fridge was over 8°C on Sunday and under -5°C on Monday.
4. The temperature in the fridge decreased by approximately 1.9°C over two days from Monday to Wednesday.
5. Our apples are stored in the refrigerator that contains a large fruit drawer and a small dairy drawer that keep the food perfectly.

Output: After I put the above data to my developed CFG and pre-processing pipeline, I get the output as shown below-

20	John	—	PROPN	PERSON	Ent	MeasEnt	
21	's	—	PART		Ent	MeasEnt	
22	heart	—	NOUN		Ent	MeasEnt	
23	rate	—	NOUN		Ent	MeasEnt	
24	was	—	AUX		Ent	MeasEnt	
25	greater	—	ADJ		Ent	MeasEnt	
26	than	—	ADP		Ent	MeasEnt	
27	90	—	NUM		Ent	MeasEnt	
28	beats	—	NOUN		Ent	MeasEnt	
29	/	—	SYM		Ent	MeasEnt	
30	minute	—	NOUN		Ent	MeasEnt	
31	on	—	ADP		Ent	MeasEnt	
32	Wednesday	—	PROPN	DATE	Ent	MeasEnt	
33	after	—	SCONJ		Ent	MeasEnt	
34	he	—	PRON		Ent	MeasEnt	
35	ate	—	VERB		Ent	MeasEnt	
36	an	—	DET		Ent	MeasEnt	
37	apple	—	NOUN		Ent	MeasEnt	
38	.	—	PUNCT		Ent	MeasEnt	
39	The	—	DET		Ent	MeasEnt	
40	apple	—	NOUN		Ent	MeasEnt	
41	rolled	—	VERB		Ent	MeasEnt	
42	5	—	NUM	QUANTITY	Ent	MeasEnt	
43	meters	—	NOUN	QUANTITY	Ent	MeasEnt	
44	from	—	ADP		Ent	MeasEnt	
45	the	—	DET		Ent	MeasEnt	
46	fridge	—	NOUN		Ent	MeasEnt	
47	to	—	ADP		Ent	MeasEnt	
48	the	—	DET		Ent	MeasEnt	
49	office	—	NOUN		Ent	MeasEnt	
50	in	—	ADP		Ent	MeasEnt	
51	6	—	NUM	TIME	Ent	MeasEnt	
52	seconds	—	NOUN	TIME	Ent	MeasEnt	

53	last	—	ADJ	DATE	Ent	MeasEnt		
54	Monday	—	PROPN	DATE	Ent	MeasEnt		
55	and	—	CCONJ		Ent	MeasEnt		
56	John	—	PROPN	PERSON	Ent	MeasEnt		
57	ate	—	VERB		Ent	MeasEnt		
58	it	—	PRON		Ent	MeasEnt		
59	.	—	PUNCT		Ent	MeasEnt		
60	Sadly	—	ADV		Ent	MeasEnt		
61	,	—	PUNCT		Ent	MeasEnt		
62	the	—	DET		Ent	MeasEnt		
63	temperature	—		NOUN		Ent	MeasEnt	
64	in	—	ADP		Ent	MeasEnt		
65	the	—	DET		Ent	MeasEnt		
66	fridge	—	NOUN		Ent	MeasEnt		
67	was	—	AUX		Ent	MeasEnt		
68	over	—	ADP		Ent	MeasEnt		
69	8	—	NUM		Ent	MeasEnt		
70	°	—	NOUN		Ent	MeasEnt		
71	C	—	NOUN		Ent	MeasEnt		
72	on	—	ADP		Ent	MeasEnt		
73	Sunday	—	PROPN	DATE	Ent	MeasEnt		
74	and	—	CCONJ		Ent	MeasEnt		
75	under	—	ADP		Ent	MeasEnt		
76	-5	—	PUNCT		Ent	MeasEnt		
77	°	—	NOUN		Ent	MeasEnt		
78	C	—	NOUN		Ent	MeasEnt		
79	on	—	ADP		Ent	MeasEnt		
80	Monday	—	PROPN	DATE	Ent	MeasEnt		
81	.	—	PUNCT		Ent	MeasEnt		
82	The	—	DET		Ent	MeasEnt		
83	temperature	—		NOUN		Ent	MeasEnt	
84	in	—	ADP		Ent	MeasEnt		
85	the	—	DET		Ent	MeasEnt		
86	fridge	—	NOUN		Ent	MeasEnt		
87	decreased	—	VERB		Ent	MeasEnt		
88	by	—	ADP		Ent	MeasEnt		
89	approximately	—		ADV	CARDINAL	Ent	MeasEnt	
90	1.9	—	NUM	CARDINAL		Ent	MeasEnt	
91	°	—	NOUN		Ent	MeasEnt		
92	C	—	NOUN		Ent	MeasEnt		
93	over	—	ADP		Ent	MeasEnt		
94	two	—	NUM	DATE	Ent	MeasEnt		
95	days	—	NOUN	DATE	Ent	MeasEnt		
96	from	—	ADP		Ent	MeasEnt		
97	Monday	—	PROPN	DATE	Ent	MeasEnt		
98	to	—	ADP	DATE	Ent	MeasEnt		
99	Wednesday	—		PROPN	DATE	Ent	MeasEnt	
100	.	—	PUNCT		Ent	MeasEnt		
101	Our	—	PRON		Ent	MeasEnt		
102	apples	—	NOUN		Ent	MeasEnt		
103	are	—	AUX		Ent	MeasEnt		
104	stored	—	VERB		Ent	MeasEnt		
105	in	—	ADP		Ent	MeasEnt		
106	the	—	DET		Ent	MeasEnt		
107	refrigerator	—	NOUN		Ent	MeasEnt		
108	that	—	PRON		Ent	MeasEnt		

109	contains	—	VERB	Ent	MeasEnt
110	a	—	DET	Ent	MeasEnt
111	large	—	ADJ	Ent	MeasEnt
112	fruit	—	NOUN	Ent	MeasEnt
113	drawer	—	NOUN	Ent	MeasEnt
114	and	—	CCONJ	Ent	MeasEnt
115	a	—	DET	Ent	MeasEnt
116	small	—	ADJ	Ent	MeasEnt
117	dairy	—	NOUN	Ent	MeasEnt
118	drawer	—	NOUN	Ent	MeasEnt
119	that	—	PRON	Ent	MeasEnt
120	keep	—	VERB	Ent	MeasEnt
121	the	—	DET	Ent	MeasEnt
122	food	—	NOUN	Ent	MeasEnt
123	perfectly	—	ADV	Ent	MeasEnt

For more details, please access to my code here,

https://drive.google.com/file/d/1ps0xa8tx5Zhc_6lke1kPFBuC3Jz_sk8r/view?usp=sharing