NLP parser on subset of english sentences related to IIITB academics

By Karthik Hegde (IMT2018509)

Instructions to run the program

- python3 parser.py
- Enter the sentence for which a parse tree needs to be built and pressenter

Tested Sentences

The following is a non-exhaustive list of sentences for which the parser builds a meaningful parse tree structure.

- He will be taking another class today.
- His registration number is IMT2018509.
- He is teaching ML.
- He is another teacher.
- He is the another teacher who teaches VR.
- There are many teachers and instructors.
- There are several teachers in IIITB.

- There are several teachers in IIITB who are working as researchers.
- Each prof will be taking four classes in the fall.
- All profs can come to the campus from January.
- All profs will be allowed to the campus but students will not be allowed.
- Hence the campus is large.
- Hence there are five people in the campus.
- Few profs can come to the campus from May whereas students are not allowed and hence there are five people in the campus.
- Prof. Madhav Rao is taking the class today and tomorrow.

→ 'today' and 'tomorrow' are mainly considered to be adverbs in this english subset

- All the students should reside in the hostel.
- Who is taking the class on Friday?
- Who is taking the ML course on Saturday and Sundays?
- Who is taking the ML course in the fall and VR course in the spring?
- Who is Tejas Kotha and what is he teaching?
- Who is Tejas Kotha and what does he do?
- Who is Tejas Kotha and what does he do in the campus?
- Will prof. Raghavan be taking class now?
- Will prof. Dinesh and prof. Viswanath be teaching VR at 11:30pm?
- Do the IIITB students apply outside for placements?

- What courses relating to ML are offered this semester?
- What courses relating to ML are offered this semester, and are taught by Prof. Dinesh?
- Who is the prof. that teaches the largest classes at IIITB?
- Will the exams be conducted online this time?
- Prof. Srikanth who teaches Computer Graphics course will be giving a lecture today.