

Assignment 5

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Code Explanation.

- The code uses multiple natural language processing techniques and pattern matching to identify words for fitting in the fields of the prolog advisory system.
- It identifies the branch, semester, list of courses done previously, and list of branches for which electives are to be suggested.
- It also identifies the interests and asserts them as facts to the prolog database.
- Finally, it queries the *main* program in prolog and prints the electives.

Working And Assumptions.

1. Input Required:

An input text file including sentences in English that needs to be taken as input for the advisory system.

2. Run the program by typing: *py A5_2019472.py*

3. Assumptions.

The first sentence is about the branch, second for the semester, third for the previously done courses, fourth for the branches, and the rest are the interests of the user.

Sample Outputs.

Input.

I am a student of branch CSAI. My next semester is winter. I have done courses mth100, cse101, and com100. I would like to take courses from cse and ssh branches only. I like designing biometric systems, privacy, psychology, theatre, writing, ethics, and game theory. I also like game Design

Output.

```
Welcome to Elecives Prediction System
The prediction is based on your career interests, branch preferances and courses done.

The suggested electives are:
{'Course': b'Advanced Writing'}
{'Course': b'Attention and Perception'}
{'Course': b'Cognitive Psychology'}
{'Course': b'Critical Thinking'}
{'Course': b'Learning and Memory'}
{'Course': b'Positive Psychology'}
{'Course': b'Social Psychology'}
{'Course': b'Sociological Theory'}
```

Input.

My branch is cse. The next semester is monsoon. I have not done any courses yet. I would like to take courses from cse, bio, or any other branches. I like algorithms, the Internet of things, programming, maths, linear algebra, privacy, psychology, theatre, writing, ethics, and game theory. I also like entrepreneurship and the environment.

Output.

```
Welcome to Elecives Prediction System
The prediction is based on your career interests, branch preferances and courses done.

The suggested electives are:
{'Course': b'Introduction to Programming'}
{'Course': b'Entrepreneurial Communication'}
{'Course': b'Environmental Sciences'}
```

Thank You