"More on Regular Expressions in Python"

Syntax, Grammar, Semantics

- Syntax: programming language, a grammar, a set of rules that defines the combinations of symbols that are meaningful in a language.
- Grammar: the set of rules that defines the structure of a programming language.
- Semantics: the meaning of the programs written in the language.

Regular Expressions: Math

- The language of regular expressions is the union of all regular sets.
- A regular set is a set of strings that can be described by a regular expression.

Regular Expressions: Python

- The `re` package for regular expressions in Python.
- The regular expression is compiled into a regular engines.
- They are defined by: `re.compile()`, `re.match()`, `re.search()`, etc.

More as Rels in Python

- The `re` package is part of the Python standard library.
- It is used to search for patterns in strings.
- The `re` package supports several regular expression flavors.

Summary: Regular Expressions

- Regular expressions are very formally defined using grammars.
- Types of grammars are defined by regular languages.
- Regular expressions are very simple and effective for extracting data.
- More in the lab!