Department of Computer Science and Engineering
PES University, Bangalore, India

Lecture Notes
Python for Computational Problem Solving
UE23CS151A

Lecture #6
Syntax, Semantics and Program Translation

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Syntax:

The syntax of a language is a set of characters allowed in the language in a specific order or sequence(arrangement)**. Basically, it is the set of rules to be followed** in a particular language.

Example: English includes the letters of the alphabet, punctuation, and properly spelled words and properly punctuated sentences. Syntax in English sets forth a specific order for grammatical elements like subjects, verbs, direct and indirect objects, etc.

The following is a syntactically correct sentence in English,

"Hello there, how are you?"

The following, however, is not syntactically correct,

"Hello there, how are you"

"Hello there, hoe are you?"

Semantics:

The semantics of a language is the meaning associated with each syntactically correct sequence of characters.

Example:

  "how you hello are?"

This sentence is syntactically correct but has no meaning. Thus, it is semantically incorrect.

The above discussion on syntax and semantics is general discussion. We will be discussing about the python syntax and semantics later.

Note: Every language has its own syntax **and semantics.**

Program Translation: Refer to Lecture #9 notes.

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