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| **Title** | 7th homework in Python Programming class by 201923250 |

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**Review for pages from 3 to 72**

Python is an object-oriented, modern programming language that is simple to understand. It has a versatile range of interconnected data types and control mechanisms. It is simple to use. The python is typed and collected with dynamics. It supports multiple programming paradigms, including structured, object-oriented, and functional programming.

Statements can not be contained in a sentence because list and other understanding or lambda terms can not contain statements, both of which are expressions. A special case of this is that a declaration of assignment such as a = 1 can not be part of a conditional declaration expression.

This has the benefit of eliminating a classic C error where an assignment operator = for an equality operator = = is confused under conditions: if (c = 1) {... } The C code is syntactically correct (but potentially unintended), but if c = 1: ... In Python, this creates a syntax error.

Python uses duck type which has untyped variable names, but has typed objects. At compile time, type restrictions are not checked; instead, an object operation will fail and mean that the object in question is not of an acceptable type. Despite being dynamically typed, Python is strongly typed, forbidding operations which are unknown instead of silently trying to make sense of them (for example by adding a number to a string).