

Syntax	Example	Description
Variables	<code>x = 5</code>	Assign a value to a variable
Conditionals	<code>if x == 5: print("x is 5")</code>	Execute code only if a condition is met
Loops	<code>for i in range(5): print(i)</code>	Execute code repeatedly
Functions	<code>def my_func(x, y): return x + y</code>	Reusable block of code that performs a specific task
Classes	<code>class MyClass: def __init__(self, x): self.x = x def my_method(self): print(self.x)</code>	Blueprint for creating objects with specific attributes and methods
Imports	<code>import math print(math.sqrt(4))</code>	Use code from another module or package
Exception handling	<code>try: x = 1 / 0 except ZeroDivisionError: print("Cannot divide by zero")</code>	Handle errors that might occur during program execution
Boolean operators	<code>and, or, not</code>	Operators that operate on boolean values
Math operators	<code>+, -, *, /, //, %, **</code>	Operators that perform mathematical operations
Comparison operators	<code>==, !=, <, >, <=, >=</code>	Operators that compare values
Comprehensions	<code>[i**2 for i in range(5)]</code>	Concise syntax for creating lists, dictionaries, and sets