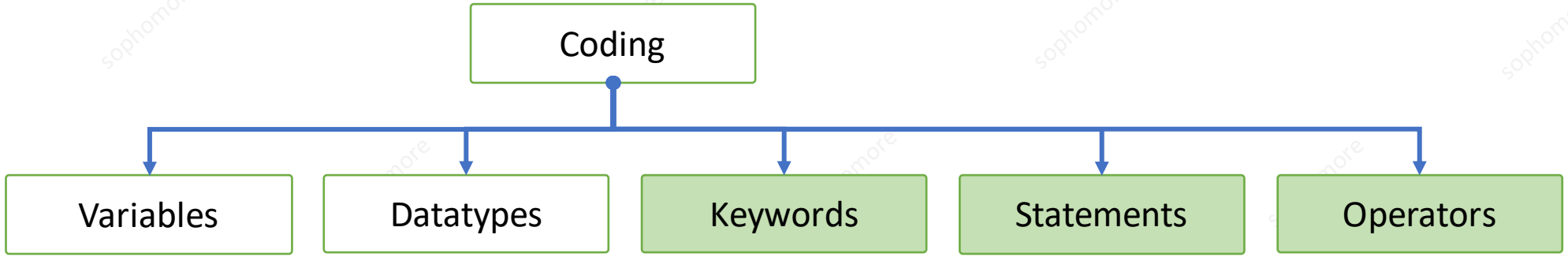
Python

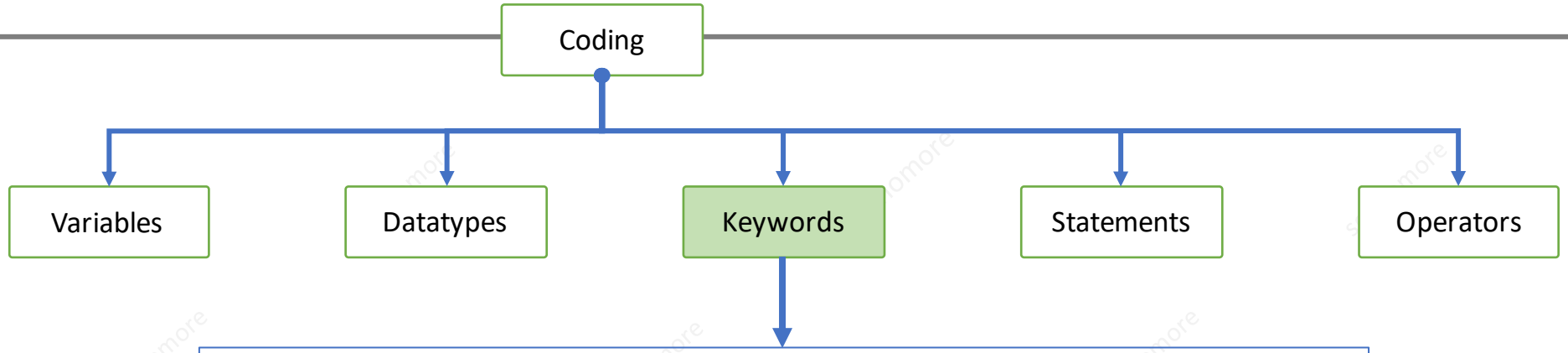
Keywords & operators

in programming

The basics blocks of coding



KEYWORDS

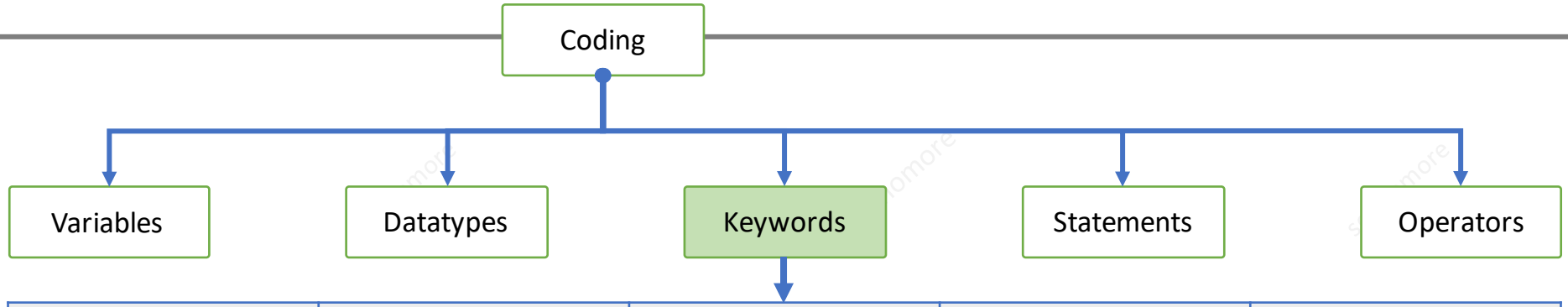


Every computer language has a number of keywords that you will need to learn along with their meanings.

keywords are special reserved words that have specific meanings and purposes and can't be used for anything but those specific purposes

there are thirty-five keywords (35) in Python.

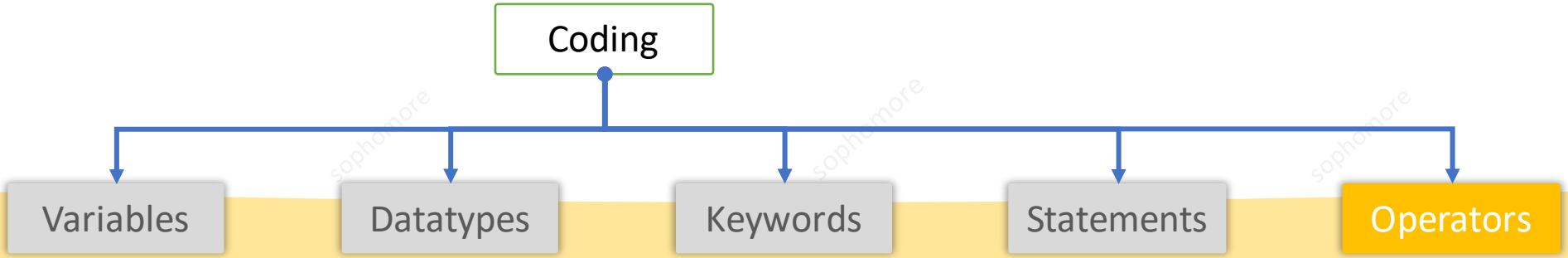
KEYWORDS



False	await	else	import	pass
None	break	except	in	raise
True	class	finally	is	return
and	continue	for	lambda	try
as	def	from	nonlocal	while
assert	del	global	not	with
async	elif	if	or	yield

Operators

OPERATORS



Operators are used to perform operations on variables and values

Python divides the operators in the following groups

- Arithmetic operators
- Assignment operators
- Comparison operators
- Logical operators
- Identity operators
- Membership operators
- Bitwise operators

Arithmetic operators

Used with numeric values to perform common mathematical operations

Operator	Symbol	Example	Result
Addition	+	**10 + 20**	30
Subtraction	-	**10 – 3**	7
Multiplication	*	**10 * 20**	200
Division	/	**10 / 3**	3.3333333
Modulus	%	**10 % 3**	1
Floor Division	//	**10 // 3**	3
Exponentiation	**	**10 ** 3**	1000

Assignment Operators

Assignment operators are used to assign values to variables

Operator	Example	Same as
=	x = 5	x = 5
+=	x += 5	x = x + 5
-=	x -= 5	x = x - 5
*=	x *= 5	x = x * 5
/=	x /= 5	x = x / 5
//=	x //= 5	x = x // 5
**=	x **= 5	x = x ** 5

Comparison Operators

Comparison operators are used to compare two values

Operator	Name	Example
==	Equal	x == 5
!=	Not Equal	x != 5
>	Greater than	x > 5
<	Less than	x < 5
>=	Greater than or equal to	x >= 5
<=	less than or equal to	x <= 5

Logical Operators

Logical operators are used to combine conditional statements

Operator	Description	Example
and	Returns True if both statements are true	**x < 5 and x < 4**
or	Returns True if one of the statements is true	**x < 5 or x < 4**
not	Reverse the result, returns False if the result is true	**not(x < 5 and x < 10)**

Identity Operators

Identity operators are used to compare the objects, not if they are equal, but if they are actually the same object, with the same memory location (works with collections mostly)

Operator	Description	Example
is	Returns True if both variables are the same object	**x is y**
is not	Returns True if both variables are not the same object	**x is not y**

Membership Operators

Membership operators are used to test if a sequence is presented in an object

Operator	Description	Example
in	Returns True if a sequence with the specified value is present in the object	**x in y**
not in	Returns True if a sequence with the specified value is not present in the object	**x not in y**

Bitwise Operators

Bitwise operators are used to compare (binary) numbers

Operator	Name	Description
&	**AND**	Sets each bit to 1 if both bits are 1
|	**OR**	Sets each bit to 1 if one of two bits is 1
^	**XOR**	Sets each bit to 1 if only one of two bits is 1
~	**NOT**	Inverts all the bits
<<	**Zero fill left shift**	Shift left by pushing zeros in from the right and let the leftmost bits fall off
>>	**Signed right shift**	Shift right by pushing copies of the leftmost bit in from the left, and let the rightmost bits fall off

Activity

LETS CODE

Assignment for

level 2

click here

THE END