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PYTHON

PYTHON FUNCTION

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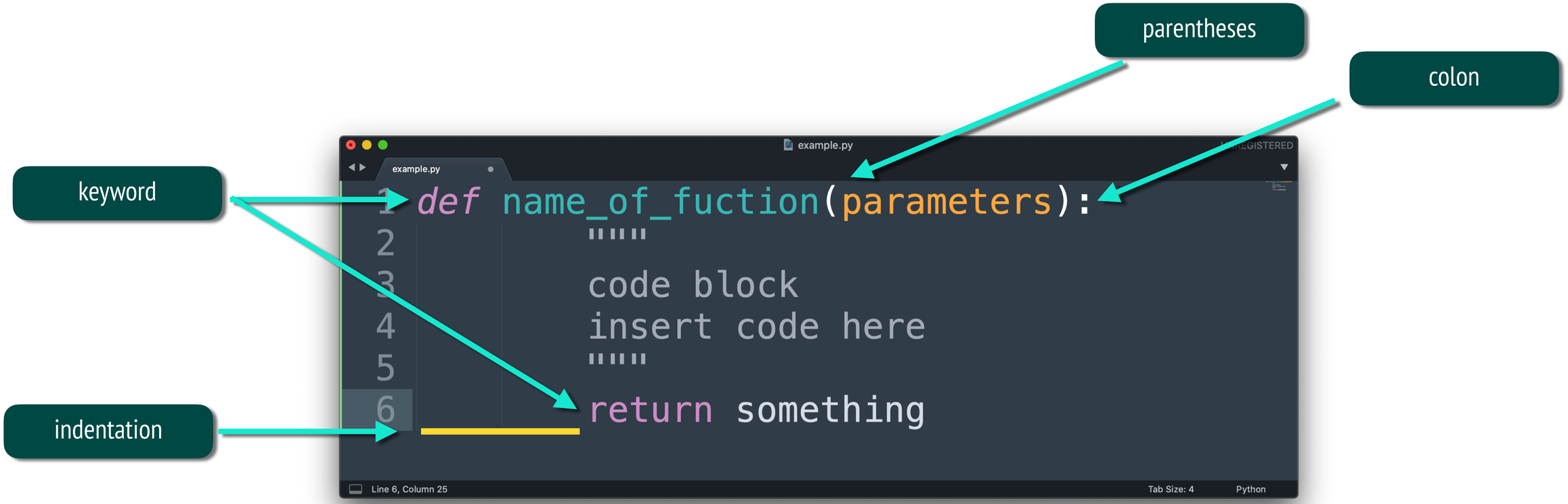
OUTLINE

- Definition
- Function construction
- Function parameter
- Assignment

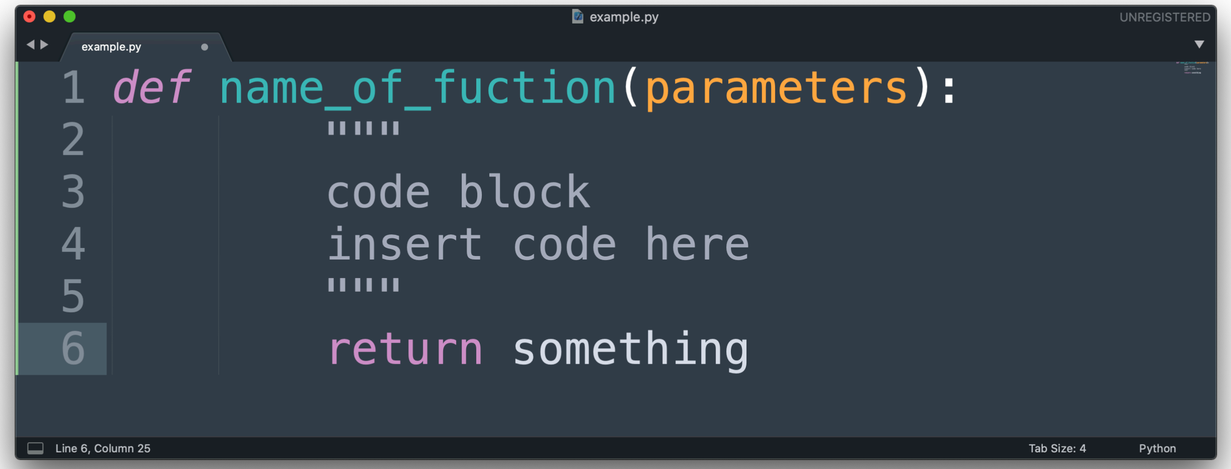
DEFINITION

- A function is a block of code which only runs when it is called
- You can pass data, known as parameters, into a function
- A function can return data as a result.

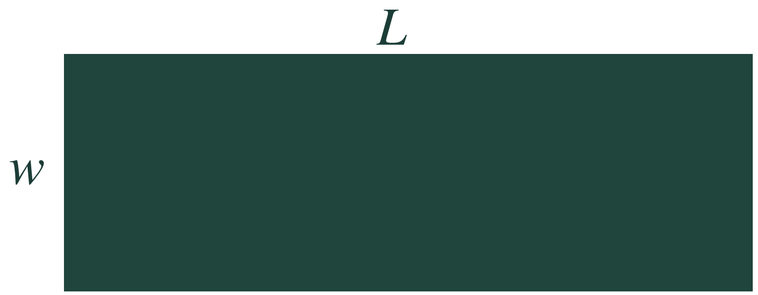


NOTES FOR FUNCTION CONSTRUCTION

- Define function name
  - ➡ Lowercase with underscores and begin with a verb
- Indentation
  - ➡ Use 4 spaces or 1 tab for indentation
- Determine function parameters
  - ➡ Input data help the function done
- Do docstring
  - ➡ Explain and describe the function
- Output of the function

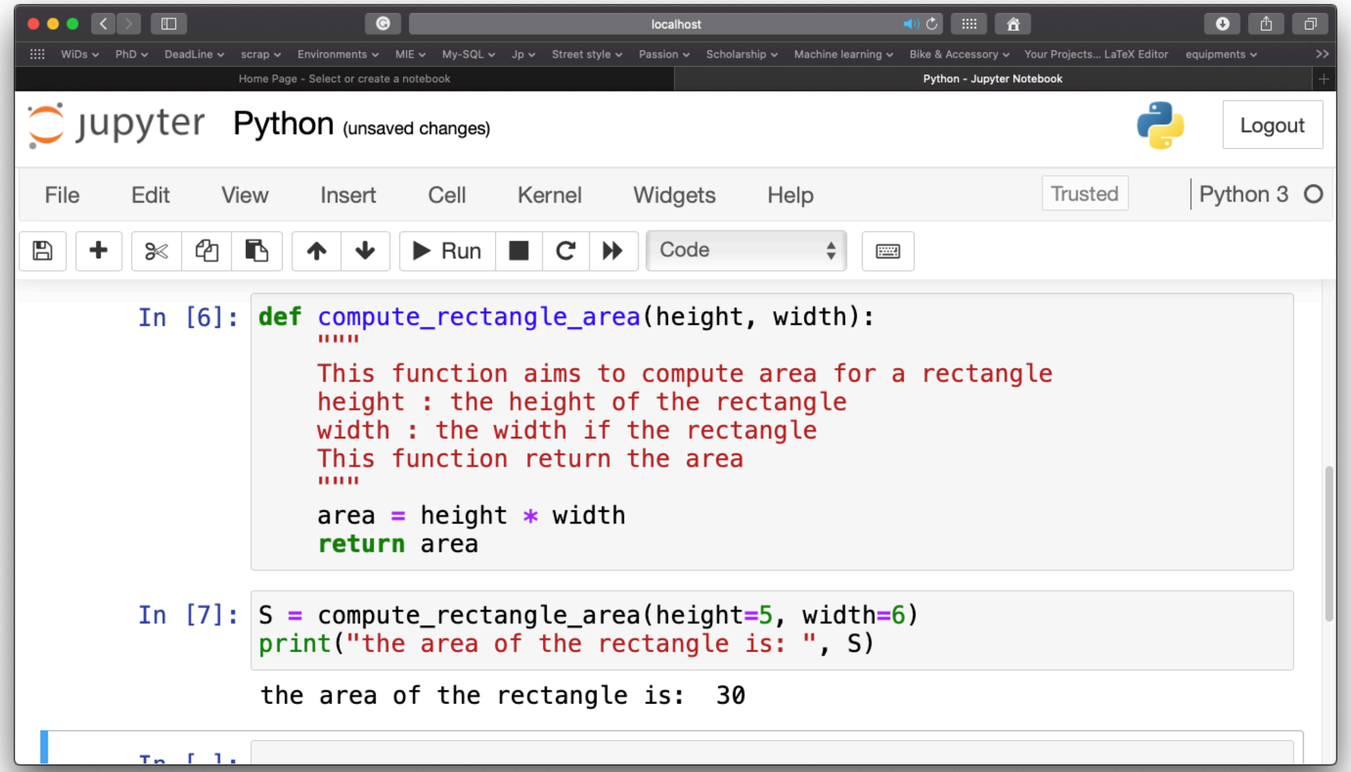


EXAMPLE



- Area of this rectangle?

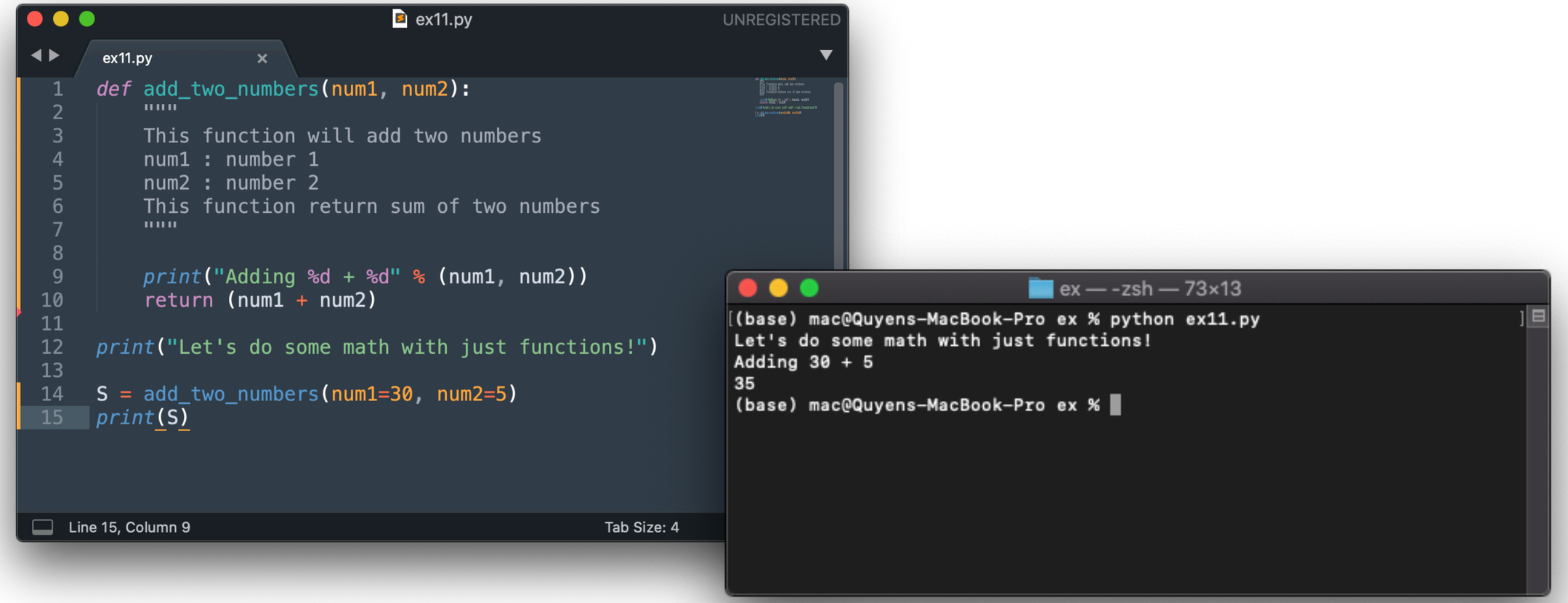
$$\Rightarrow S = L \times w$$



Name	`compute_rectangle_area`
Parameters	`height, width`
Output	`area`

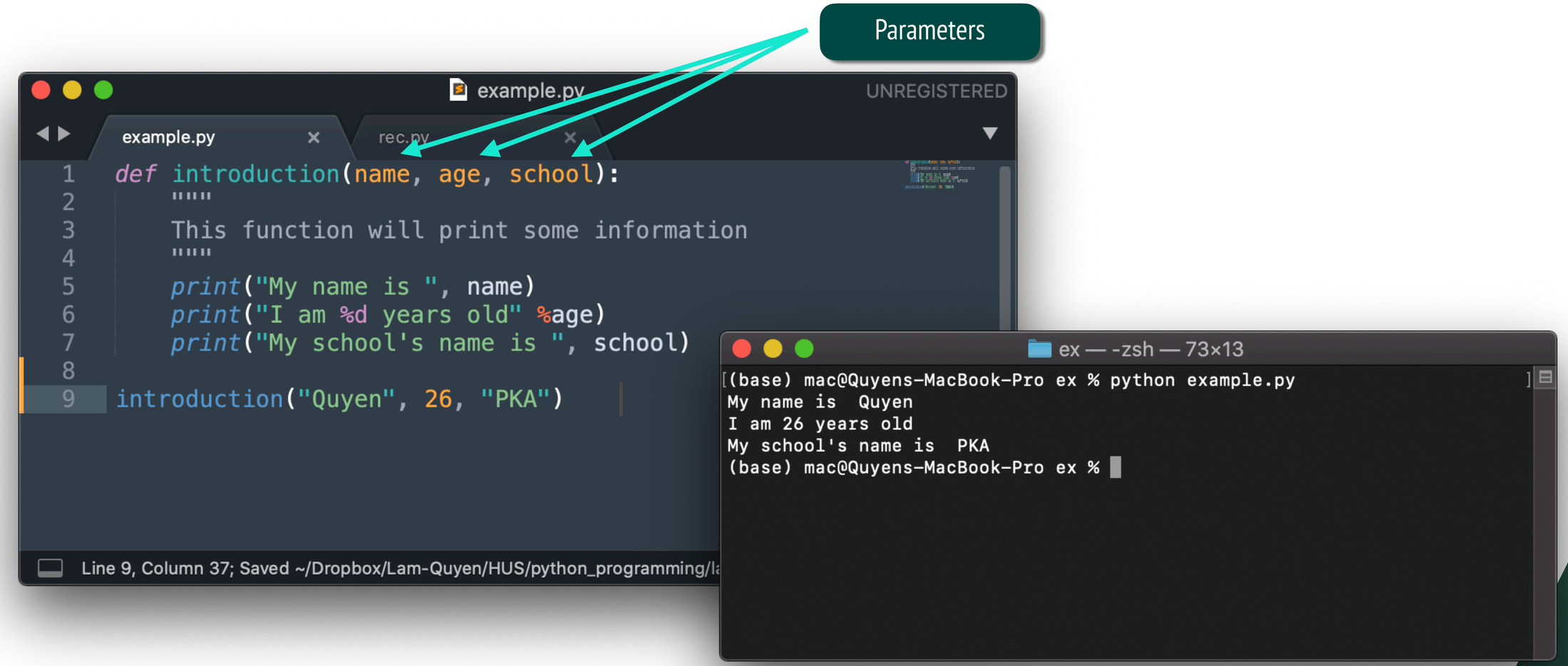
FUNCTION CREAT/CALL

- You can create a function by using the word `def` in Python
- To call a function, use the function name followed by parenthesis



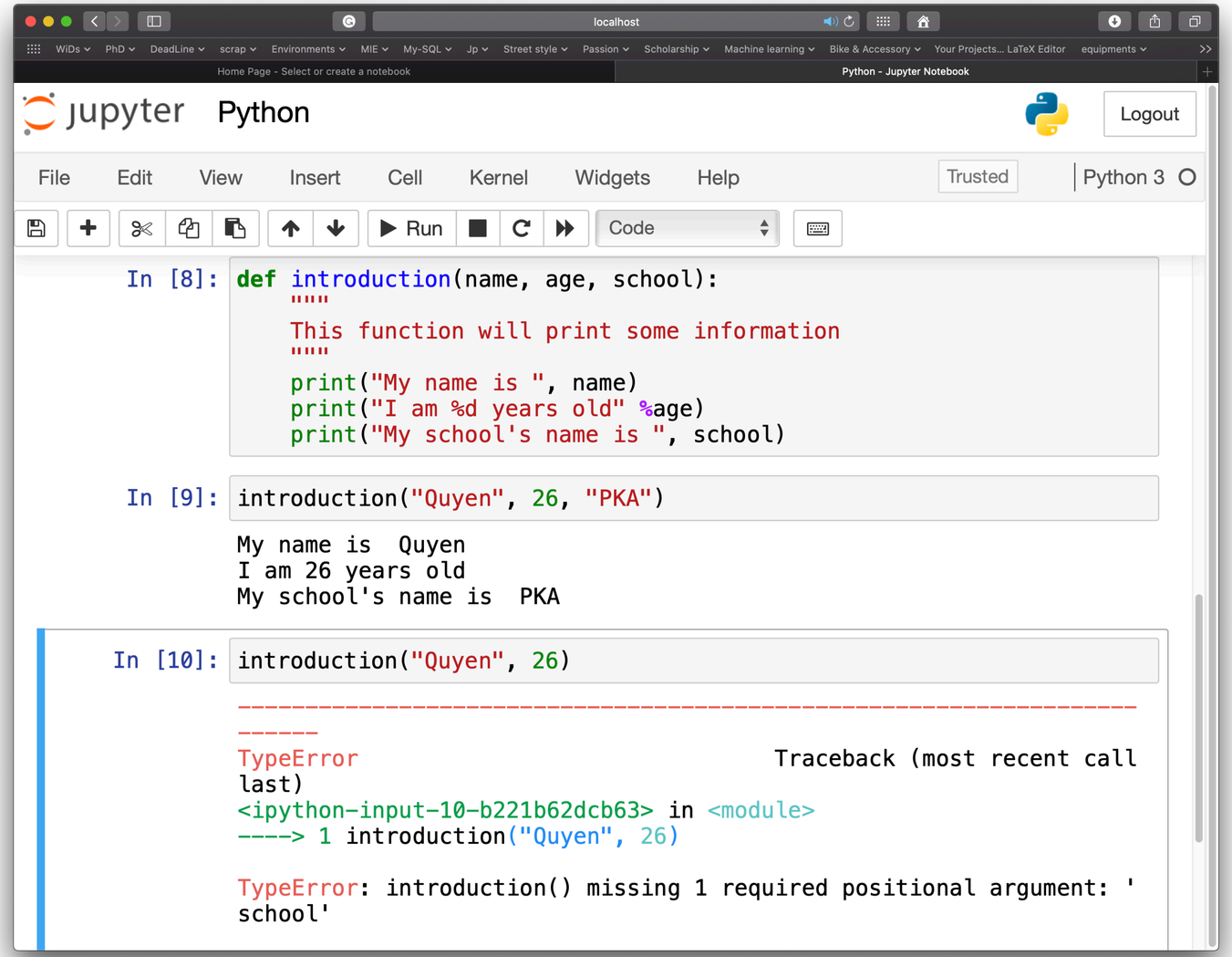
FUNCTION PARAMETERS

- Information that are passed into a function
- You can add as many arguments/parameters as you want, just separate them with a comma



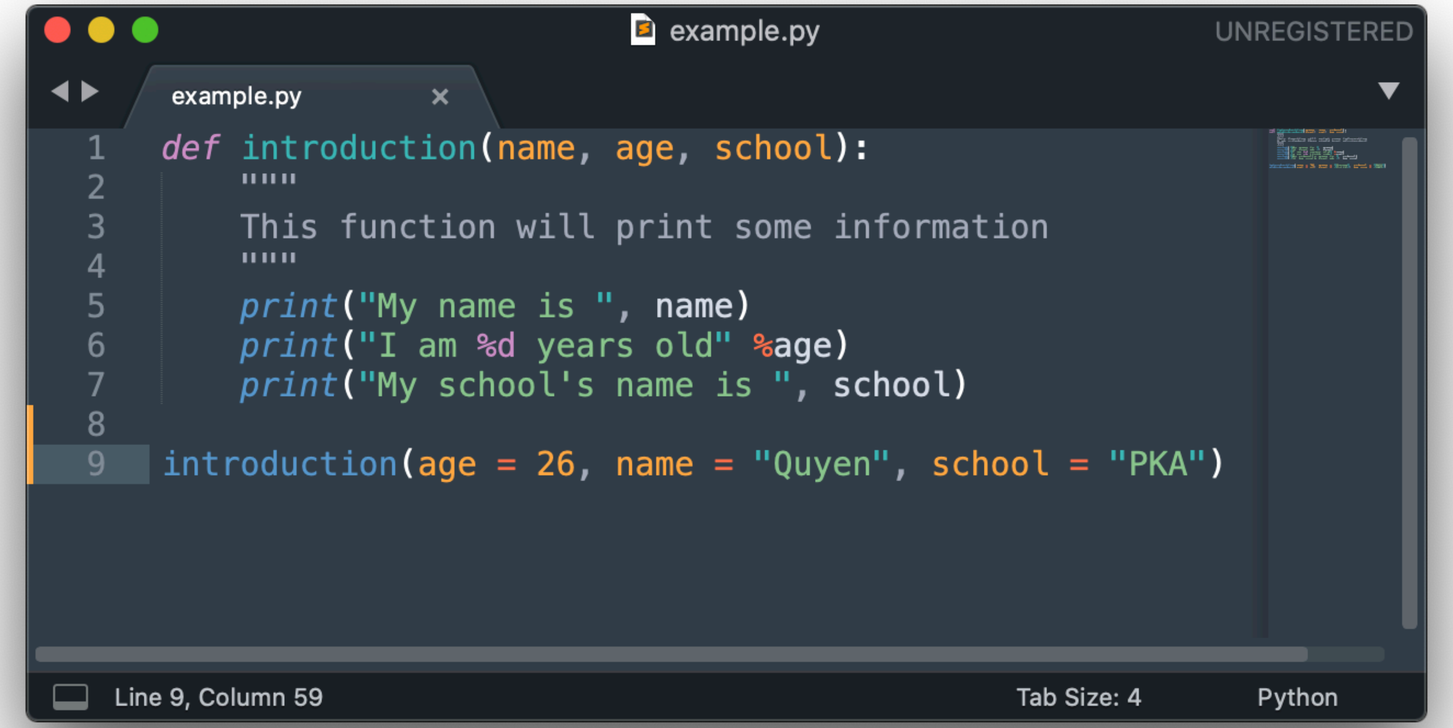
FUNCTION PARAMETERS

- By default, a function must be called with the correct number of arguments.



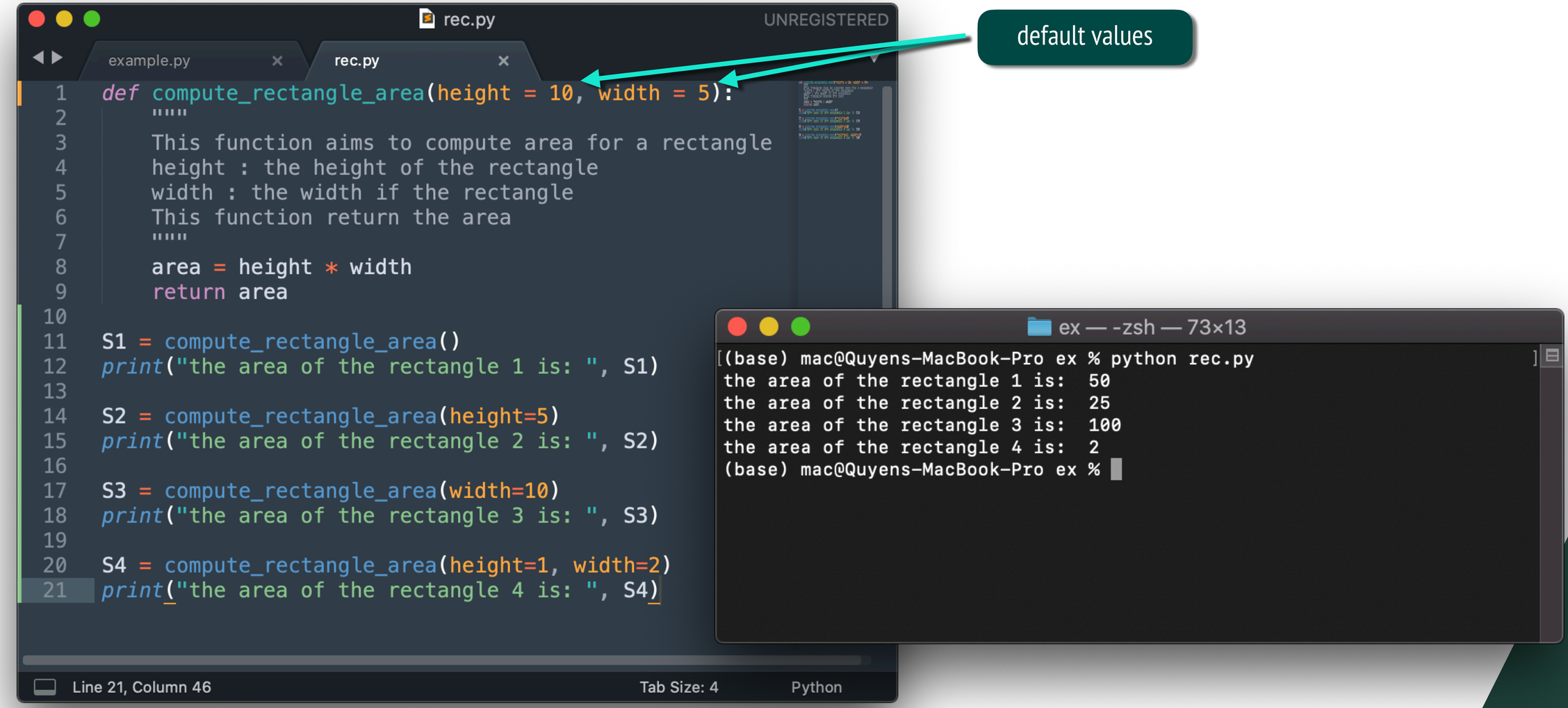
FUNCTION PARAMETERS

- You can also send arguments with the `key = value` syntax
- This way the order of the arguments does not matter



FUNCTION PARAMETERS

- If we call the function without argument, it will use the default values



ASSIGNMENT