

Python's Built-in Scope

The screenshot shows a web-based learning interface. At the top, there's a navigation bar with 'Learn / Courses / Introduction to Functions in Pyth...' and a 'Course Outline' button. On the right, it shows 'Daily XP 650' with a green dot. Below the navigation bar, there's a tabbed interface with 'Exercise' and 'IPython Shell' tabs. The 'Exercise' tab is active, showing a question about Python's built-in scope. The question text explains that the built-in module is called 'builtins' and that you need to import it to query it. It asks which of the following names is NOT in the module 'builtins'. The possible answers are 'sum', 'range', 'array', and 'tuple'. The 'sum' option is selected. There is a 'Submit Answer' button and a 'Take Hint (-15 XP)' button. The 'IPython Shell' tab is also visible, showing a prompt 'In [1]:'.

Learn / Courses / Introduction to Functions in Pyth... Course Outline Daily XP 650

Exercise

Python's built-in scope

Here you're going to check out Python's built-in scope, which is really just a built-in module called `builtins`. However, to query `builtins`, you'll need to `import builtins` because the name `builtins` is not itself built in...No, I'm serious! ([Learning Python, 5th edition](#), Mark Lutz). After executing `import builtins` in the IPython Shell, execute `dir(builtins)` to print a list of all the names in the module `builtins`. Have a look and you'll see a bunch of names that you'll recognize! Which of the following names is NOT in the module `builtins`?

Instructions 50 XP

Possible answers

- ☒ `'sum'`
- ☐ `'range'`
- ☐ `'array'`
- ☐ `'tuple'`

Submit Answer

Take Hint (-15 XP)

IPython Shell Slides

In [1]:

Question:

Here you're going to check out Python's built-in scope, which is really just a built-in module called 'builtins'.

To query 'builtins', you need to import builtins because the name builtins is not itself built-in.

After executing `import builtins` in the Python Shell, execute `dir(builtins)` to print a list of all the names in the module 'builtins'.

Which of the following names is NOT in the module 'builtins'?

Possible answers:

1. 'sum'
2. 'range'
3. 'array'
4. 'tuple'

Correct Answer:

The correct answer is: 'array'

Explanation:

1. The built-in module 'builtins' contains a list of all built-in functions, constants, and types that Python provides without any imports.
2. 'sum', 'range', and 'tuple' are part of the builtins module as they are widely used built-in functions and types in Python.
3. 'array', however, is not part of the builtins module. It is part of the 'array' module in Python, which must be explicitly imported to use.
4. To confirm, running `import builtins` and then `dir(builtins)` will display all the names in the module, and 'array' will not be listed.