



# AI Bridge

## Lecture 3

# Lecture Outline

**What is a function?**

**Built-ins**

**Importing**

**Function defining**

# What is a function?



Input

The diagram illustrates the concept of a function. It features two main components: a dark green rectangular box on the left containing the word "Input" in white text, and a larger dark blue rounded rectangular box on the right containing the word "Function" in white text. The boxes are positioned horizontally, suggesting a flow from the input to the function.

Function

# What is a function?

## print()

"Hello world!"

Print

# Lecture Outline

**What is a function?**

**Built-ins**

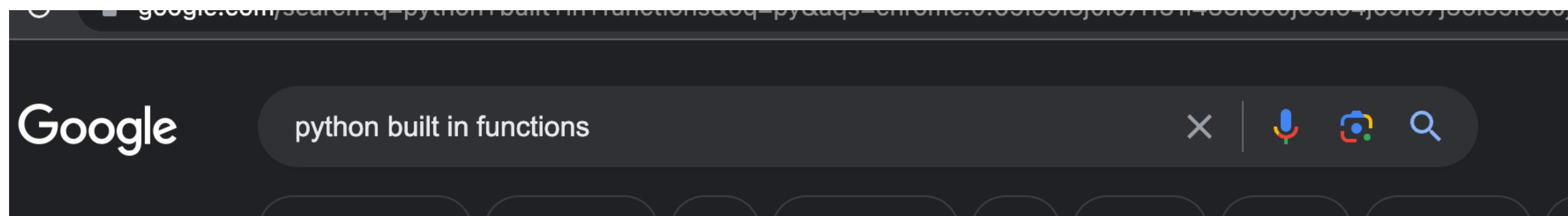
**Importing**

**Function defining**

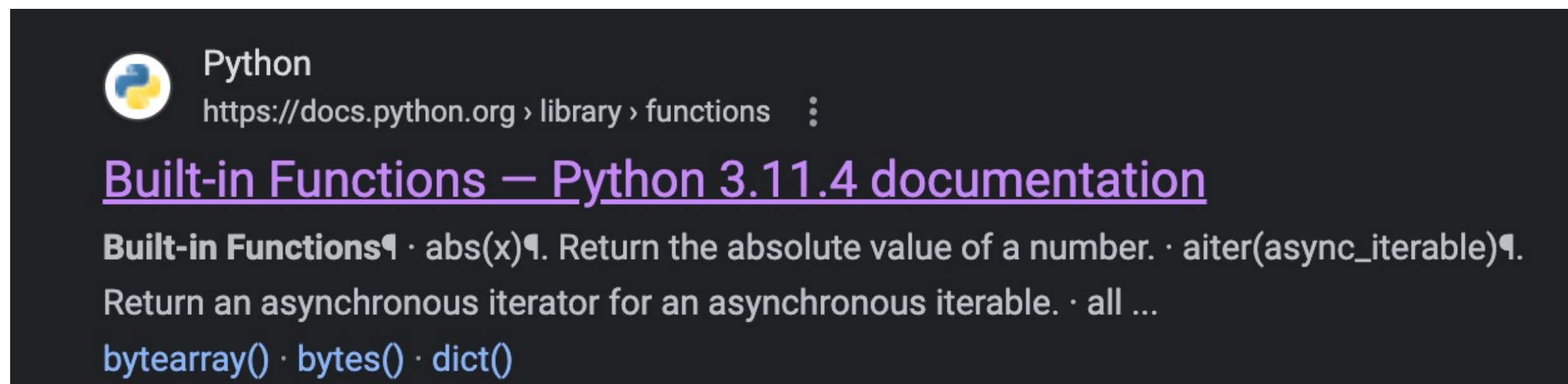
# Built-ins

<https://docs.python.org/3/library/functions.html>

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②



# Lecture Outline

**What is a function?**

**Built-ins**

**Importing**

**Function defining**

# Importing

Module

Python

Burp



# Importing

```
import sklearn  
from sklearn import linear_model  
import sklearn as skl
```

# Lecture Outline

**What is a function?**

**Built-ins**

**Importing**

**Function defining**

# Function defining

Arguments passed



```
def function_name(arg1, arg2, ...):  
    # do stuff here
```

# Function defining return

Arguments passed



```
def function_name(arg1, arg2, ...):  
    # do stuff here  
    return data
```

# Function defining return

```
def factorial(n):  
    total = 1  
    for i in range(1, n+1):  
        total *= i  
    return total  
# some code later  
factorial(5) →
```

**n=**

**(=120)**

# Function defining return

```
def factorial(n):  
    total = 1  
    for i in range(1, n+1):  
        total *= i  
    return total  
                                (=120)
```

```
# some code later  
factorial(n=5) →
```

**An alternative...**

# Function defining Default

Assumes default



```
def factorial(n=6):  
    total = 1  
    for i in range(1, n+1):  
        total *= i  
    return total  
                (=720)
```

```
# some code later  
factorial() →
```