

# Built-in Functions

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The Python interpreter has a number of functions and types built into it that are always available.

## Built-in Functions

[need to add details]

### See also:

- [Built-in Functions - Python 3.12.1 documentation](#)

## Built-in Sequence Functions

- [#1 Python zip\(\) Function](#)
- [#2 Python Zip Function: Handling Lists with Different Numbers of Elements](#)
- [Python Iterators and Iterables: How to Loop Over Lists and Iterators](#)
- [How to Iterate Over Tuples with the Enumerate Function](#)
- [Finding the maximum value in a list using a one-liner](#)
- [Find the sum of all even numbers between 1 and 100 using a one-liner](#)
- [Counting the number of occurrences of an element in a list](#)

## Key Terms

True/False (Mark T for True and F for False)

**Answer Key (True/False):**

Multiple Choice (Select the best answer)

**Answer key (Multiple Choice):**

**What is the output of the following Python code?**

```
numbers = [10, 32, 98, 38, 47, 34] print(max(numbers))
```

- \*\*A.\*\* 10
- \*\*B.\*\* 32
- \*\*C.\*\* 98
- \*\*D.\*\* 38

**Watch this video for the answer:** [https://youtube.com/shorts/x7zh\\_WqO1e4](https://youtube.com/shorts/x7zh_WqO1e4)

**What is the output of the following code?** [Python Quiz #11]

```
def my_func(fruit):  
    if fruit:
```

```
        return True
    return False

fruits = ["apple","", "orange",
,"mango" ]

print(list(filter(my_func,fruits)))
```python

**A)** ['apple', 'orange', 'mango']
**B)** ['apple', '', 'orange', 'mango']
**C)** ['', '', '']
**D)** ['True', 'False', 'True', 'True']
```

**\*\*Watch this video for the answer:\*\*** [<https://youtube.com/shorts/gkGpJfxsDew>]  
(<https://youtube.com/shorts/gkGpJfxsDew>)

**#43 What is the output of the zip() function when one iterable is shorter than the others?**

Watch the Video Tutorial for the Answer: <https://youtube.com/shorts/T0xTxP9x4ME?feature=share>

**#python #pythonpoll #MCQsTest #yasirbhutta**

- a) The function raises an exception
- b) The function returns only the tuples that have corresponding elements in all iterables
- c) The function pads the shorter iterable with None values
- d) The function pads the shorter iterable with the last value of the iterable

Answer: b) The function returns only the tuples that have corresponding elements in all iterables

**#42 What does the zip() function in Python do?**

Watch the Video Tutorial for the Answer: <https://youtube.com/shorts/7ix3cDWAsUc?feature=share>

**#python #pythonpoll #MCQsTest #yasirbhutta**

- a) Compresses a file into a ZIP archive
- b) Combines two or more iterables into a single iterable of tuples, where each tuple contains one element from each iterable
- c) Creates a dictionary from two iterables, with keys from one iterable and values from another iterable
- d) Calculates the checksum of a file

Answer: b) Combines two or more iterables into a single iterable of tuples, where each tuple contains one element from each iterable

Q: What is the syntax for the zip() function in Python?

- a) zip(iterable1, iterable2)

- b) zip(iterable1, iterable2, ...)
- c) zip(\*iterables)
- d) zip(iterables)

Answer: c) zip(\*iterables)

Q: How can you use the zip() function to unzip a list of tuples?

- a) list(zip(\*tuples\_list))
- b) tuple(zip(\*tuples\_list))
- c) set(zip(\*tuples\_list))
- d) dict(zip(\*tuples\_list))

Answer: a) list(zip(\*tuples\_list))

## ## Fill in the Blanks

**\*\*Answer Key (Fill in the Blanks):\*\***

## ## Exercises

## ## Review Questions

## ## References and Bibliography

[1]“Built-in Functions – Python 3.12.4 documentation,” docs.python.org.  
[<https://docs.python.org/3/library/functions.html>]  
(<https://docs.python.org/3/library/functions.html>)