



# Python Try Except

[< Previous](#)[Next >](#)

The `try` block lets you test a block of code for errors.

The `except` block lets you handle the error.

The `else` block lets you execute code when there is no error.

The `finally` block lets you execute code, regardless of the result of the try- and except blocks.

## Exception Handling

When an error occurs, or exception as we call it, Python will normally stop and generate an error message.

These exceptions can be handled using the `try` statement:

### Example

[Get your own Python Server](#)

The `try` block will generate an exception, because `x` is not defined:

```
try:
    print(x)
except:
    print("An exception occurred")
```

[Try it Yourself »](#)

Since the try block raises an error, the except block will be executed.

Without the try block, the program will crash and raise an error:

### Example

This statement will raise an error, because `x` is not defined:

```
print(x)
```

[Try it Yourself »](#)

## Many Exceptions

You can define as many exception blocks as you want, e.g. if you want to execute a special block of code for a special kind of error:

### Example

Print one message if the try block raises a `NameError` and another for other errors:



Tutorials ▾

Exercises ▾

Services ▾



✦ Plus

&lt;/&gt; Spaces

🛒 Get Certified

Sign Up

Log in



CSS

JAVASCRIPT

SQL

PYTHON

JAVA

PHP

HOW TO

W3.CSS

C

C++

C#

BOOTSTRAP

REACT

MYSQL

```
print( Variable X is not defined )
except:
    print("Something else went wrong")
```

Try it Yourself »

## Else

You can use the `else` keyword to define a block of code to be executed if no errors were raised:

### Example

In this example, the `try` block does not generate any error:

```
try:
    print("Hello")
except:
    print("Something went wrong")
else:
    print("Nothing went wrong")
```

Try it Yourself »

## Finally

The `finally` block, if specified, will be executed regardless if the try block raises an error or not.

### Example

```
try:
    print(x)
except:
    print("Something went wrong")
finally:
    print("The 'try except' is finished")
```

Try it Yourself »

This can be useful to close objects and clean up resources:

### Example

Try to open and write to a file that is not writable:

```
try:
    f = open("demofile.txt")
    try:
        f.write("Lorum Ipsum")
    except:
        print("Something went wrong when writing to the file")
    finally:
        f.close()
```



The program can continue, without leaving the file object open.

## Raise an exception

As a Python developer you can choose to throw an exception if a condition occurs.

To throw (or raise) an exception, use the `raise` keyword.

### Example

Raise an error and stop the program if x is lower than 0:

```
x = -1

if x < 0:
    raise Exception("Sorry, no numbers below zero")
```

Try it Yourself »

The `raise` keyword is used to raise an exception.

You can define what kind of error to raise, and the text to print to the user.

### Example

Raise a TypeError if x is not an integer:

```
x = "hello"

if not type(x) is int:
    raise TypeError("Only integers are allowed")
```

Try it Yourself »

## Exercise ?

In a `try...except` block, there is a certain block that if specified, will be executed regardless if the `try` block raises an error or not. What is the name of this block?

- ☐ finally
- ☐ last
- ☐ allways

Submit Answer »

< Previous

Next >

Get your  
knowledge  
certified!

Start Today!



COLOR PICKER



SPACES

UPGRADE

AD-FREE

NEWSLETTER

GET CERTIFIED

CONTACT US

### Top Tutorials

- HTML Tutorial
- CSS Tutorial
- JavaScript Tutorial
- How To Tutorial
- SQL Tutorial
- Python Tutorial
- W3.CSS Tutorial
- Bootstrap Tutorial
- PHP Tutorial
- Java Tutorial
- C++ Tutorial
- jQuery Tutorial

### Get Certified

- HTML Certificate
- CSS Certificate
- JavaScript Certificate
- Front End Certificate
- SQL Certificate
- Python Certificate
- PHP Certificate
- jQuery Certificate
- Java Certificate
- C++ Certificate
- C# Certificate
- XML Certificate

### Top References

- HTML Reference
- CSS Reference
- JavaScript Reference
- SQL Reference
- Python Reference
- W3.CSS Reference
- Bootstrap Reference
- PHP Reference
- HTML Colors
- Java Reference
- Angular Reference
- jQuery Reference

### Top Examples

- HTML Examples
- CSS Examples
- JavaScript Examples
- How To Examples
- SQL Examples
- Python Examples
- W3.CSS Examples
- Bootstrap Examples
- PHP Examples
- Java Examples
- XML Examples
- jQuery Examples



FORUM ABOUT CLASSROOM

