

# Python File Detection

Python can check to see if a file exists on the computer. The **OS** module provides functions for interacting with the operating system. OS, comes under Python's standard utility modules. This module provides a portable way of using operating system dependent functionality. The `*os*` and `*os.path*` modules include many functions to interact with the file system.

First – place a file on your PC in a location you remember called “pythonTest.txt”.

When specifying a **path**, either use `\\` or `/` - Python does not recognise `\` unless preceded by the `\` escape character.

```
# \ is the escape sequence in a string so use \\
path = "c:\\data\\pythonTest.txt"

#alternatively use / in place of \ in the path
path = "c:/data/pythonTest.txt"
```

We can check that the **path** exists:

```
import os
path = "c:\\data\\pythonTest.txt"

if os.path.exists(path):
    print("The specified path exists.")
else:
    print("This location doesn't exist!")
```

We can check whether the path contains a directory or a file:

```
import os
path = "c:\\data\\pythonTest.txt"

if os.path.exists(path):
    print("The specified path exists")
    if os.path.isfile(path):
        print("and it contains the file!")
    elif os.path.isdir(path):
        print("and it is a directory")
else:
    print("This location doesn't exist!")
```

Returns:

```
The specified path exists
and it contains the file!
```