

Test Program

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Introduction

This test program prints the word “hello”, followed by the name of the operating system as understood by Python. It is implemented in Python and uses the `os` module. It builds the message string in two different ways, and writes separate versions of the program to two different files.

Implementation

Output files

This document contains the makings of two files; the first, `test.py`, uses simple string concatenation to build its output message:

test.py (1)

```
Import the os module (3)
Get the OS description (4)
Construct the message with Concatenation (5)
Print the message (7)
```

The second uses string substitution:

test2.py (2)

```
Import the os module (3)
Get the OS description (4)
Construct the message with Substitution (6)
```

Print the message (7)

Retrieving the OS description

First we must import the `os` module so we can learn about the OS:

Import the os module (3)

```
import os
```

Used by: `test.py` (1); `test2.py` (2)

That having been done, we can retrieve Python's name for the OS type:

Get the OS description (4)

```
os_name = os.name
```

Used by: `test.py` (1); `test2.py` (2)

Building the message

Now, we're ready for the meat of the application: concatenating two strings:

Construct the message with Concatenation (5)

```
msg = "Hello, " + os_name + "!"
```

Used by: `test.py` (1)

But wait! Is there a better way? Using string substitution might be better:

Construct the message with Substitution (6)

```
msg = "Hello, %s!" % os_name
```

Used by: `test2.py` (2)

We'll use the first of these methods in `test.py`, and the other in `test2.py`.

Printing the message

Finally, we print the message out for the user to see. Hopefully, a cheery greeting will make them happy to know what operating system they have:

Print the message (7)

```
print msg
```

Used by: `test.py` (1); `test2.py` (2)