# Python sys Module - All Methods with 3 Examples Each

## sys.argv

import sys  
print(sys.argv)

# Run with: python file.py hello world  
# Output: ['file.py', 'hello', 'world']

import sys  
for i, arg in enumerate(sys.argv):  
 print(f'Argument {i}: {arg}')

## sys.exit()

import sys  
print('Exiting')  
sys.exit()

import sys  
if True:  
 sys.exit('Exiting due to condition')

import sys  
try:  
 sys.exit(1)  
except SystemExit as e:  
 print(f'Exit code: {e.code}')

## sys.version

import sys  
print(sys.version)

import sys  
if '3.10' in sys.version:  
 print('Using Python 3.10')

import sys  
version\_info = sys.version.split()  
print(version\_info)

## sys.path

import sys  
print(sys.path)

import sys  
sys.path.append('/my/custom/path')  
print(sys.path)

import sys  
if '.' not in sys.path:  
 sys.path.append('.')

## sys.platform

import sys  
print(sys.platform)

import sys  
if sys.platform.startswith('win'):  
 print('Running on Windows')

import sys  
print('Platform type:', 'Linux' if 'linux' in sys.platform else 'Other')

## sys.maxsize

import sys  
print(sys.maxsize)

import sys  
if sys.maxsize > 100000:  
 print('64-bit system')

import sys  
print(f'Max size of integer: {sys.maxsize}')

## sys.stdin / stdout / stderr

import sys  
sys.stdout.write('Hello via stdout\n')

import sys  
sys.stderr.write('This is an error message\n')

import sys  
print('Enter something:')  
data = sys.stdin.readline()  
print('You entered:', data)

## sys.modules

import sys, math  
print('math' in sys.modules)

import sys  
import os  
print(sys.modules['os'])

import sys  
print(len(sys.modules))

## sys.getsizeof()

import sys  
x = 42  
print(sys.getsizeof(x))

import sys  
print(sys.getsizeof('hello world'))

import sys  
l = [1, 2, 3]  
print(sys.getsizeof(l))

## sys.setrecursionlimit() / sys.getrecursionlimit()

import sys  
print(sys.getrecursionlimit())

import sys  
sys.setrecursionlimit(2000)  
print(sys.getrecursionlimit())

import sys  
try:  
 sys.setrecursionlimit(-1)  
except ValueError as e:  
 print(e)