# Python Examples

## Python Syntax

print("Hello, World!")

#This is a comment.

print("Hello, World!")

"""This is a

multiline docstring."""

print("Hello, World!")

## Python Variables

x = 5

y = "John"

print(x)

print(y)

x = "Python"

y = "is"

z = "awesome"

print(x, y, z)

x = "Python "

y = "is "

z = "awesome"

print(x + y + z)

## Python Numbers

x = 1

y = 2.8

z = 1j

print(type(x))

print(type(y))

print(type(z))

x = 1

y = 35656222554887711

z = -3255522

print(type(x))

print(type(y))

print(type(z))

x = 1.10

y = 1.0

z = -35.59

print(type(x))

print(type(y))

print(type(z))

x = 35e3

y = 12E4

z = -87.7e100

print(type(x))

print(type(y))

print(type(z))

x = 3+5j

y = 5j

z = -5j

print(type(x))

print(type(y))

print(type(z))

## Python Casting

x = int(1)

y = int(2.8)

z = int("3")

print(x)

print(y)

print(z)

x = float(1)

y = float(2.8)

z = float("3")

w = float("4.2")

print(x)

print(y)

print(z)

print(w)

x = str("s1")

y = str(2)

z = str(3.0)

print(x)

print(y)

print(z)

## Python Strings

a = "Hello, World!"

print(a[1])

b = "Hello, World!"

print(b[2:5])

a = " Hello, World! "

print(a.strip())

a = "Hello, World!"

print(len(a))

a = "Hello, World!"

print(a.lower())

a = "Hello, World!"

print(a.upper())

a = "Hello, World!"

print(a.replace("H", "J"))

a = "Hello, World!"

b = a.split(",")

print(b)

## Python Operators

x = 5

y = 3

print(x + y)

x = 5

y = 3

print(x – y)

x = 5

y = 3

print(x \* y)

x = 12

y = 3

print(x / y)

x = 5

y = 2

print(x % y)

x = 5

print(x)

## Python Lists