

Chapter A

(察するPython入門)

A01

A010

```
print("hello")
```

```
hello
```

A011

```
print('hello')
```

```
hello
```

A012

```
print('The sign says, "Hello, World!"')
```

```
The sign says, "Hello, World!"
```

A013

```
print("The sign says, "Hello, World!"")
```

(error)

```
print("The sign says, "Hello, World!"")
                          ^
SyntaxError: invalid syntax
```

A014

```
print("The sign says, \"Hello, World!\")
```

The sign says, "Hello, World!"

A015

```
print("' ... single quotaion")
print("\" ... double quotaion")

print('\ ' ... single quotaion')
print('" ... double quotaion')
```

```
' ... single quotation
" ... double quotation
' ... single quotation
" ... double quotation
```

A016

```
print("hello, " + "world!")
```

hello, world!

A017

```
print("1 + 1 = " + "2")
```

1 + 1 = 2

A018

```
print("1 + 1 = " + 2)
```

(error)

```
-----  
-  
...  
----> 1 print("1 + 1 = " + 2)  
  
TypeError: can only concatenate str (not "int") to str
```

A019

```
# あいさつをするプログラム  
print("hello") # hello と表示
```

hello

A02

A020

```
print(11 + 3)  
print(11 - 3)  
print(11 * 3)  
print(11 / 3)
```

```
14  
8  
33  
3.6666666666666665
```

A021

```
print(11 // 3)  
print(11 % 3)
```

```
3  
2
```

A022

```
print(5 ** 2)
```

```
25
```

A023

```
print(1j * 1j)
```

```
(-1+0j)
```

A024

```
print(j * j) # error
```

(error)

```
-----  
-  
----> 1 print(j * j)  
  
NameError: name 'j' is not defined
```

A025

```
print((1 + 1j) ** 2)
```

```
2j
```

A03

A030

```
print(type(3))  
print(type(3.0))
```

```
<class 'int'>  
<class 'float'>
```

A031

```
print(type(11 + 3))  
print(type(11 - 3))  
print(type(11 * 3))  
print(type(11 / 3))  
print(type(11 // 3))  
print(type(11 % 3))  
print(type(11 ** 3))
```

```
<class 'int'>  
<class 'int'>  
<class 'int'>  
<class 'float'>  
<class 'int'>  
<class 'int'>  
<class 'int'>
```

A032

```
print(type(11 + 3.0))  
print(type(11 - 3.0))  
print(type(11 * 3.0))  
print(type(11 / 3.0))  
print(type(11 // 3.0))  
print(type(11 % 3.0))  
print(type(11 ** 3.0))
```

```
<class 'float'>  
<class 'float'>  
<class 'float'>  
<class 'float'>  
<class 'float'>  
<class 'float'>  
<class 'float'>
```

A033

```
print(type(1j))
```

```
<class 'complex'>
```

A034

```
print(type("3"))
```

```
<class 'str'>
```

A04

A040

```
print("1 + 1 = " + (1 + 1)) # error
```

(error)

```
-----  
-  
...  
----> 1 print("1 + 1 = " + (1 + 1))  
  
TypeError: can only concatenate str (not "int") to str
```

A041

```
print("1 + 1 = " + str(1 + 1))
```

```
1 + 1 = 2
```

A042

```
print(f"1 + 1 = {1 + 1}")
```

1 + 1 = 2

A05

A050

```
your_name = "Taro"  
print("Hello, " + your_name + "-san!")
```

Hello, Taro-san!

A051

```
your_name = "Taro"  
print(f"Hello, {your_name}-san!")
```

Hello, Taro-san!

A052

```
num1 = 2  
num2 = 3  
print(f"{num1} + {num2} = {num1 + num2}")
```

2 + 3 = 5

A053

```
print(num100) # error
```

(error)

```
-----  
-  
...  
----> 1 print(num100)  
  
NameError: name 'num100' is not defined
```

A054

```
x = 1  
y = 2 * x + 1  
  
print(y)
```

3

A055

```
t = 2 * s + 1 # error  
  
s = 1  
print(t)
```

(error)

```
-----  
-  
...  
----> 1 t = 2 * s + 1  
      2  
      3 s = 1  
      4 print(t)  
  
NameError: name 's' is not defined
```

A056


```
x = 1
y = 2 * x + 1

print(y)

y = 3 * x + 5
```

3

A057

```
x = 1
x = 2 * x + 1

print(x)
```

3

A06

A060

```
your_name = input("your name: ")

print(f"Hello, {your_name}-san!")
```

```
your name: Taro↵
Hello, Taro-san!
```

A061

```
num1 = input("num1: ")

print(num1 + 1) # error
```

(error)

```
num1: 5↵
```

```
-----  
-  
...  
    1 num1 = input("num1: ")  
    2  
----> 3 print(num1 + 1)  
  
TypeError: can only concatenate str (not "int") to str
```

A062

```
num1 = int(input("num1: "))  
  
print(num1 + 1)
```

```
num1: 5↵  
6
```

A063

```
num1 = float(input("num1: "))  
  
print(num1 + 1)
```

```
num1: 5.3↵  
6.3
```

A064

```
num1 = input("num1: ")  
  
print(type(num1))
```

```
num1: 5↵  
<class 'str'>
```

A065

```
num1 = int(input("num1: "))  
num2 = int(input("num2: "))  
  
print(f"num1 + num2 = {num1} + {num2} = {num1 + num2}")
```

```
num1: 2↵  
num2: 3↵  
num1 + num2 = 2 + 3 = 5
```