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
```

A026

```
print(complex(1, 1) ** 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
```