Serie N°2

Partie1 : Conditions

Exercise 1

What is the output of the following snippet?

```
x = 5
y = 10
z = 8
```

```
print(x > y)
print(y > z)
```

Exercise 2

What is the output of the following snippet?

```
x, y, z = 5, 10, 8
```

```
print(x > z)
print((y - 5) == x)
```

Exercise 3

What is the output of the following snippet?

```
x, y, z = 5, 10, 8
x, y, z = z, y, x
```

```
print(x > z)
print((y - 5) == x)
```

Exercise 4

What is the output of the following snippet?

```
x = 10
```

```
if x == 10:
    print(x == 10)
if x > 5:
    print(x > 5)
if x < 10:
    print(x < 10)
else:
```

```
    print("else")
```

Exercise 5

What is the output of the following snippet?

```
x = "1"

if x == 1:
    print("one")
elif x == "1":
    if int(x) > 1:
        print("two")
    elif int(x) < 1:
        print("three")
    else:
        print("four")
if int(x) == 1:
    print("five")
else:
    print("six")
```

Exercise 6

What is the output of the following snippet?

```
x = 1
y = 1.0
z = "1"

if x == y:
    print("one")
if y == int(z):
    print("two")
elif x == y:
    print("three")
else:
    print("four")
```

Partie1 : Boucles

Exercise 1

Create a `for` loop that counts from 0 to 10, and prints odd numbers to the screen. Use the skeleton below:

```
for i in range(1, 11):
    # Line of code.
        # Line of code.
```

Exercise 2

Create a `while` loop that counts from 0 to 10, and prints odd numbers to the screen. Use the skeleton below:

```
x = 1
while x < 11:
    # Line of code.
        # Line of code.
    # Line of code.
```

Exercise 3

Create a program with a `for` loop and a `break` statement. The program should iterate over characters in an email address, exit the loop when it reaches the `@` symbol, and print the part before `@` on one line. Use the skeleton below:

```
for ch in "john.smith@pythoninstitute.org":
    if ch == "@":
        # Line of code.
    # Line of code.
```

Exercise 4

Create a program with a `for` loop and a `continue` statement. The program should iterate over a string of digits, replace each `0` with `x`, and print the modified string to the screen. Use the skeleton below:

```
for digit in "0165031806510":
    if digit == "0":
        # Line of code.
        # Line of code.
    # Line of code.
```

Exercise 5

What is the output of the following code?

```
n = 3

while n > 0:
    print(n + 1)
    n -= 1
else:
    print(n)
```

Exercise 6

What is the output of the following code?

```
n = range(4)

for num in n:
```

```
    print(num - 1)
else:
    print(num)
```

Exercise 7

What is the output of the following code?

```
for i in range(0, 6, 3):
    print(i)
```