

Loop

SHUTCHON PREMCHAI SAWATT

เนื้อหา

1. For
2. While
3. Loop & Statement

1. For

1.1 Standard For

1.2 For + String

1.3 For + List

1.4 For + Tuple

1.5 For + Dictionary

1.6 For + Set

1.1 Standard For

1.1.1 for i in range (end)

1.1.2 for i in range (start, end)

1.1.3 for i in range (start, end, step)

1.1.1 for i in range (end)

```
In [1]: 1 for i in range(5):  
        2     print(i)
```

```
0  
1  
2  
3  
4
```

1.1.2 for i in range (start, end)

In [2]:



```
1 for i in range(5, 11):  
2     print(i)
```

```
5  
6  
7  
8  
9  
10
```

1.1.3 for i in range (start, end, step)

In [3]: ▶

```
1 for i in range(10, 20, 2):  
2     print(i)
```

```
10  
12  
14  
16  
18
```

1.2 For + String

In [4]: ▶

```
1 char = 'Python'
2 n = len(char)
3 for i in range(n):
4     print(char[i])
```

P
y
t
h
o
n

1.2 For + String

In [5]: ▶

```
1 char = 'Python'
2 for i in range(len(char)):
3     print(char[i])
```

P
y
t
h
o
n

1.2 For + String

In [6]: ▶

```
1 char = 'Python'
2 for c in char:
3     print(c)
```

P
y
t
h
o
n

1.2 For + String

In [7]: ▶

```
1 char = 'Python'
2 for i,c in enumerate(char):
3     print(i, c)
```

```
0 P
1 y
2 t
3 h
4 o
5 n
```

1.3 For + List

```
In [8]: ▶ 1 listx = ['a', 'b', 'c', 'd', 'e']  
        2 n = len(listx)  
        3 for i in range(n):  
        4     print(listx[i])
```

```
a  
b  
c  
d  
e
```

1.3 For + List

In [9]: ▶

```
1 listx = ['a', 'b', 'c', 'd', 'e']
2 for i in range(len(listx)):
3     print(listx[i])
```

a
b
c
d
e

1.3 For + List

In [10]:



```
1 listx = ['a', 'b', 'c', 'd', 'e']
2 for x in listx:
3     print(x)
```

a
b
c
d
e

1.3 For + List

```
In [11]: ▶ 1 listx = ['a', 'b', 'c', 'd', 'e']  
          2 for i, x in enumerate(listx):  
          3     print(i, x)
```

```
0 a  
1 b  
2 c  
3 d  
4 e
```

1.4 For + Tuple

In [12]:



```
1 tuplex = ('a', 'b', 'c', 'd', 'e')
2 n = len(tuplex)
3 for i in range(n):
4     print(tuplex[i])
```

a
b
c
d
e

1.4 For + Tuple

In [13]:



```
1 tuplex = ('a', 'b', 'c', 'd', 'e')
2 for i in range(len(tuplex)):
3     print(tuplex[i])
```

a
b
c
d
e

1.4 For + Tuple

In [14]:



```
1 tuplex = ('a', 'b', 'c', 'd', 'e')
2 for x in tuplex:
3     print(x)
```

a
b
c
d
e

1.4 For + Tuple

In [15]: ▶

```
1 tuplex = ('a', 'b', 'c', 'd', 'e')
2 for i, x in enumerate(tuplex):
3     print(i, x)
```

```
0 a
1 b
2 c
3 d
4 e
```

1.5 For + Dictionary

In [16]: ▶

```
1 dictx = {'firstname' : 'John', 'lastname' : 'Doe', 'age' : 32}
2 for key in dictx:
3     print(key)
```

```
firstname
lastname
age
```

1.5 For + Dictionary

In [17]:



```
1 dictx = {'firstname' : 'John', 'lastname' : 'Doe', 'age' : 32}
2 for key in dictx.keys():
3     print(key)
```

```
firstname
lastname
age
```

1.5 For + Dictionary

```
In [18]: ▶ 1 dictx = {'firstname' : 'John', 'lastname' : 'Doe', 'age' : 32}
          2 for value in dictx.values():
          3     print(value)
```

```
John
Doe
32
```

1.6 For + Set

```
In [19]: ▶ 1 setx = {1, 2, 3, 'a', 'b', 'c'}  
          2 for x in setx:  
          3     print(x)
```

```
b  
1  
2  
3  
a  
c
```

เนื้อหา

1. For เชื้อด

2. While

3. Loop & Statement

2. While Loop

In [20]: ▶

```
1 i = 1
2 while i <= 5:
3     print(i)
4     i = i + 1
```

1
2
3
4
5

2. While Loop

In [21]:



```
1 i = 5
2 while i <= 15:
3     print(i)
4     i = i + 2
```

```
5
7
9
11
13
15
```

2. While Loop

In [22]: ▶

```
1 i = 0
2 while True:
3     print(i)
4     if i == 5:
5         break
6     i = i + 1
```

0
1
2
3
4
5

เนื้อหา

~~1. For~~ เชื่อม

~~2. While~~ เชื่อม

3. Loop & Statement

3. Loop & Statement

3.1 break

3.2 continue

3.3 pass

3.1 break

In [23]: ▶

```
1 for i in range(100000):  
2     print(i)  
3     if i == 5:  
4         break
```

0
1
2
3
4
5

3.2 continue

In [24]: ▶

```
1 for i in range(10):  
2     if i%2 == 0:  
3         continue  
4         print('hello')  
5     else:  
6         print(i)
```

```
1  
3  
5  
7  
9
```

3.3 pass

In [25]: ▶

```
1 for i in range(10):  
2     if i%2 == 0:  
3         pass  
4         print('hello')  
5     else:  
6         print(i)
```

```
hello  
1  
hello  
3  
hello  
5  
hello  
7  
hello  
9
```


3.3 pass

In [26]: ▶

```
1 v_list = [120, 70, 90]
2 for v in v_list:
3     if v >= 120:
4         pass
5     else:
6         print('500 baht finepage x')
```

500 baht finepage x

500 baht finepage x

เนื้อหา

- ~~1. For~~ เชื่อม
- ~~2. While~~ เชื่อม
- ~~3. Loop & Statement~~ เชื่อม