Loop

SHUTCHON PREMCHAISAWATT

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]:   char = 'Python'
          for c in char:
              print(c)

P
y
t
h
o
n
```

1.2 For + String

```
In [7]:   char = 'Python'
          for i,c in enumerate(char):
              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]:  listx = ['a', 'b', 'c', 'd', 'e']
         for i in range(len(listx)):
             print(listx[i])
```

```
a
b
c
d
e
```

1.3 For + List

```
In [10]:  listx = ['a', 'b', 'c', 'd', 'e']
          for x in listx:
              print(x)
```

```
a
b
c
d
e
```

1.3 For + List

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

```python
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 เชือด

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 เชือด

2. While เชือด

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]:

```python
for i in range(10):
    if i%2 == 0:
        continue
        print('hello')
    else:
        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]:

```python
v_list = [120, 70, 90]
for v in v_list:
    if v >= 120:
        pass
    else:
        print('500 baht finepage x')
```

```
500 baht finepage x
500 baht finepage x
```

เนื้อหา

1. For เชือด

2. While เชือด

3. Loop & Statement เชือด