

Playing around with the Loops



```
var = 0
```

```
while var < 10 :
```

```
    print(var)
```

```
    var = var + 1
```

```
print ("bye")
```

```
var = 0
```

```
while expression var < 10:
```

```
body {  
    print(var)  
    var = var + 1  
}
```

```
print ("bye")
```

→ **var** = 0

while **var** < 10 :

 print(**var**)

var = **var** + 1

print ("bye")

var = 0

→ while ⁽⁰⁾**var** < 10 :

 print(**var**)

var = **var** + 1

print ("bye")

var = 0

→ while ⁽⁰⁾**var** < 10 : True *(good to go into the while body)*

print(**var**)

var = **var** + 1

print ("bye")

Output:

0

var = 0

while ⁽⁰⁾**var** < 10 :

→ print(⁽⁰⁾**var**)

var = **var** + 1

print ("bye")

Output:

0

var = 0

while **var** < 10 :

print(⁽⁰⁾**var**)

→ ^(0 + 1)**var** = **var** + 1

print ("bye")

Output:

0

```
var = 0
```

```
while var < 10 :
```

```
    print(var)
```


```
        (1) ← (0 + 1)  
    → var = var + 1
```

```
print ("bye")
```

Output:

0

var = 0

 while ⁽¹⁾**var** < 10 :

 print(**var**)

⁽¹⁾**var** = **var** + 1

print ("bye")

Output:

0

var = 0

→ while ⁽¹⁾ **var** < 10 : True (*good to go into the while body*)

print(**var**)

var = **var** + 1

print ("bye")

```
var = 0
```

```
while (1)var < 10 :
```

```
    → print((1)var)
```

```
        var = var + 1
```

```
print ("bye")
```

Output:

0

1

var = 0

while ⁽¹⁾**var** < 10 :

 print(⁽¹⁾**var**)

 → ^(1 + 1)**var** = **var** + 1

print ("bye")

Output:

0
1

Output:

var = 0

0
1

while ⁽¹⁾**var** < 10 :

 print(⁽¹⁾**var**)


⁽²⁾ ← (1 + 1)
 → **var** = **var** + 1

print ("bye")

var = 0

Output:

0
1

 while ⁽²⁾**var** < 10 :

 print(**var**)

⁽²⁾**var** = **var** + 1

print ("bye")

Output:

var = 0

0
1

→ while ⁽²⁾ **var** < 10 : True (*good to go into the while body*)

print(**var**)

var = **var** + 1

print ("bye")

var = 0

while ⁽²⁾**var** < 10 :

→ print(⁽²⁾**var**)

var = **var** + 1

print ("bye")

Output:

0

1

2

```
var = 0
```

```
while (2)var < 10 :
```

```
    print((2)var)
```

```
        (2 + 1)  
    → var = var + 1
```

```
print ("bye")
```

Output:

0
1
2

var = 0

while ⁽²⁾**var** < 10 :

⁽²⁾print(**var**)


⁽³⁾ ← (2 + 1)
 → **var** = **var** + 1

print ("bye")

Output:

0
1
2

var = 0

 while ⁽³⁾**var** < 10 :

 print(**var**)

⁽³⁾**var** = **var** + 1

print ("bye")

Output:

0

1

2

var = 0

while **var** < 10 :

print(**var**)

var = **var** + 1

print ("bye")

Output:

0

1

2

var = 0

while ⁽⁹⁾**var** < 10 :

 print(⁽⁹⁾**var**)

⁽¹⁰⁾ ← ^(9 + 1)
 → **var** = **var** + 1

print ("bye")

Output:

0
1
2
3
4
5
6
7
8
9

var = 0

(10)
while **var** < 10 :

 print(**var**)

(10)
 var = **var** + 1

print ("bye")

Output:

0
1
2
3
4
5
6
7
8
9

Output:

var = 0

→ while ⁽¹⁰⁾**var** < 10 : False (skip while body)

~~print (var)
var = var + 1~~

print ("bye")

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9


```
var = 0
```

```
while var < 10 :
```

```
    print(var)
```

```
    var = var + 1
```

```
→ print ("bye")
```

Output:

0

1

2

3

4

5

6

7

8

9

bye

```
for var in range(0, 10, 1):
```

```
var = 0
```

```
    print(var)
```

```
while var < 10 :
```

```
    print("bye")
```

```
    print(var)
```

```
    var = var + 1
```

```
print ("bye")
```

```
for var in range(0, 10, 1):
```

```
    print(var)
```

```
print("bye")
```

var= 0

```
for var in range(0, 10, 1):
```

```
    print(var)
```

```
print("bye")
```

var=	0		9
------	---	--	---

Output:

0
1
2
3
4
5
6
7
8
9
bye

for **var** in range(**0**, **10**, **1**):

↻ print(**var**)

print("bye")

