

Day 47



Walrus Operator in Python:

What Is the Walrus Operator? Walrus has very low precedence, so use parentheses.

The walrus operator is written as:

`:=`

Its official name is the assignment expression operator. It assigns a value to a variable AND returns that value at the same time.

Think of it as: “assign while using.”

Why Is It Called “Walrus”?

Because `:=` looks like a walrus face 🐧 (eyes + tusks)

Basic Syntax

(variable := expression)

Example: without any operator.

```
1 a = True
2 print(a)

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● PS E:\Python\Day41-50\Day47> python main.py
True
```

Example: problem comes when we try to change it.

```
1 a = True
2 print(a=False)

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● PS E:\Python\Day41-50\Day47> python main.py
Traceback (most recent call last):
  File "E:\Python\Day41-50\Day47\main.py", line 2, in <module>
    print(a=False)
               ^
TypeError: print() got an unexpected keyword argument 'a'
```

Example: Solution? Use walrus operator.

```
1 a = True
2 print(a:= False)

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● PS E:\Python\Day41-50\Day47> python main.py
False
```

Example: Before Walrus Operator (Traditional Way) Normally, assignment and usage are separate:

```
4 numbers = [1, 2, 3, 4, 5]
5 total = len(numbers)
6 ↘ if total > 3:
7 |   print(f"List is long ({total} items)")

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● PS E:\Python\Day41-50\Day47> python main.py
List is long (5 items)
```

Example: with walrus operator.

```
9 numbers = [1, 2, 3, 4, 5]
10 ↘ if (total := len(numbers)) > 3:
11 |   print(f"List is long ({total} items)")

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● PS E:\Python\Day41-50\Day47> python main.py
List is long (5 items)
```

Example: if and :=

```
13 if (n := int(input("Enter a number: "))) > 10:
14 |   print(f"{n} is greater than 10")

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● PS E:\Python\Day41-50\Day47> python main.py
Enter a number: 2
```

Example: if without :=

```
16 n = int(input("Enter a number: "))
17 ↘ if n > 10:
18 |   print(f"{n} is greater than 10")

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● PS E:\Python\Day41-50\Day47> python main.py
Enter a number: 9
```

--The End--