Day 25

Short hand if else statements:

What Is Shorthand if–else?

A shorthand if–else (also called ternary operator) allows you to write an if–else condition in one line.

Basic Syntax

value_if_true if condition else value_if_false

Example: a basic example.

```
1   a = 10
2   b = 20
3   max_value = a if a > b else b
4   print(max_value)
5
```

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORT

PS E:\Python\Day21-30\Day25> python main.py
20
```

Example: multiple conditions

```
7   num = 0
8   result = "Positive" if num > 0 else "Negative" if num < 0 else "Zero"
9   print(result)
```

```
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PS E:\Python\Day21-30\Day25> python main.py
Zero
```

Enumerate Function in Python:

What is enumerate()?

enumerate() is a built-in Python function used to loop over an iterable while keeping track of the index. Instead of manually counting indexes, enumerate() does it automatically.

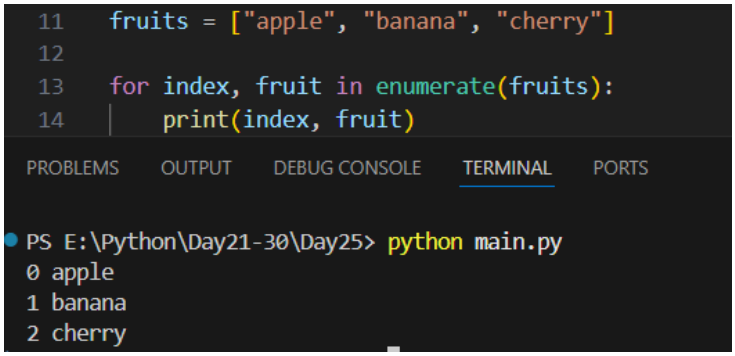
Basic Syntax

enumerate(iterable, start=0)

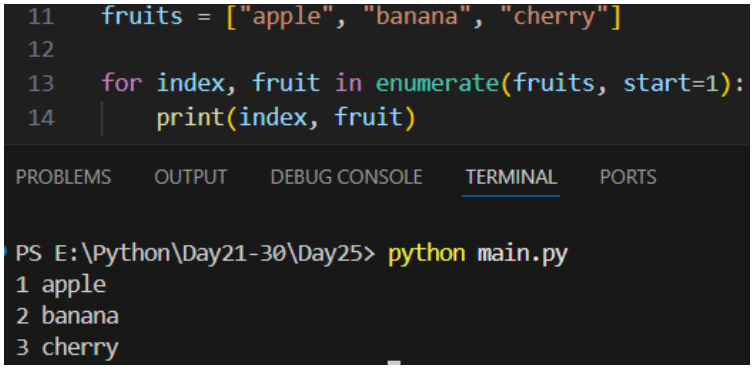
- iterable → list, tuple, string, etc.
- start → starting index (default is 0)

Example: old way

Example: a basic example printing the index number and the text at that index.



Example: enumerating with custom start index



Example: enumerate with the string.

```
22  name = "Python"
23  for index, char in enumerate(name):
24      print(index, char)
```

```
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PS E:\Python\Day21-30\Day25> python main.py
0 P
1 y
2 t
3 h
4 o
5 n
```

Example:

```
22  name = "Python"
23  for index, char in enumerate(name, start = 1):
24      print(index, char)
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS E:\Python\Day21-30\Day25> python main.py
1 P
2 y
3 t
4 h
5 o
6 n
```

Summary:

- enumerate() is a built-in Python function
- It returns index and value while looping
- Used with lists, tuples, strings, and other iterables
- Default starting index is 0
- start parameter can change the starting index
- Makes code cleaner than manual indexing
- Returns pairs as (index, item) tuples
- Commonly used in for loops

--The End--