\*\*kwargs

\*\*kwargs

\*args is used to scoop up variable amount of remaining positional arguments

The parameter name args is arbitrary – \* is the real performer here

→ tuple

\*\*kwargs is used to scoop up a variable amount of remaining keyword arguments

The parameter name kwargs is arbitrary — \*\* is the real performer here

→ dictionary

\*\*kwargs can be specified even if the positional arguments have not been exhausted (unlike keyword-only arguments)

No parameters can come after \*\*kwargs

## Example

```
def func(*, d, **kwargs):
   # code
func(d=1, a=2, b=3) \rightarrow d = 1
                                kwargs = {'a': 2, 'b': 3}
                            \rightarrow d = 1
func(d=1)
                                kwargs = {}
```

## Example

```
def func(**kwargs):
   # code
func(a=1, b=2, c=3) \rightarrow kwargs = {'a': 1, 'b': 2, 'c': 3}
func()
                           \rightarrow kwargs = \{\}
def func(*args, **kwargs):
   # code
func(1, 2, a=10, b=20) \rightarrow args = (1, 2)
                                 kwargs = \{'a': 10, 'b': 20\}
func()
                              \rightarrow args = ()
                                 kwargs = {}
```

## Code