

## 2.8: MODULUS OPERATOR



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The *modulus operator* works on integers and yields the remainder when the first operand is divided by the second. In Python, the modulus operator is a percent sign ( `%` ). The syntax is the same as for other [operators](#):

### CODE 2.8.1 (PYTHON):

```
quotient = 7 // 3
print(quotient)

remainder = 7 % 3
print(remainder)
```

runrestart

So 7 divided by 3 is 2 with 1 left over.

The modulus operator turns out to be surprisingly useful. For example, you can check whether one number is divisible by another: if `x % y` is zero, then `x` is divisible by `y`.

You can also extract the right-most digit or digits from a number. For example, `x % 10` yields the right-most digit of `x` (in base 10). Similarly, `x % 100` yields the last two digits.