## Think Python: Chapters 4-5 Review

What's the name of the % operator?

What's the name of the % operator?

Modulus

What's the value of the expression below?

>>> 26%4

What's the value of the expression below?

>>> 26%4

2

>>>

What are Python's six relational operators?

What are Python's six relational operators?

==

!=

>

<

>=

<=

What is output by the code below?

What is output by the code below?

>>> a=true

```
>>> a=true
Traceback (most recent call last):
   File "<stdin>", line 1, in <module>
NameError: name 'true' is not defined
>>>
```

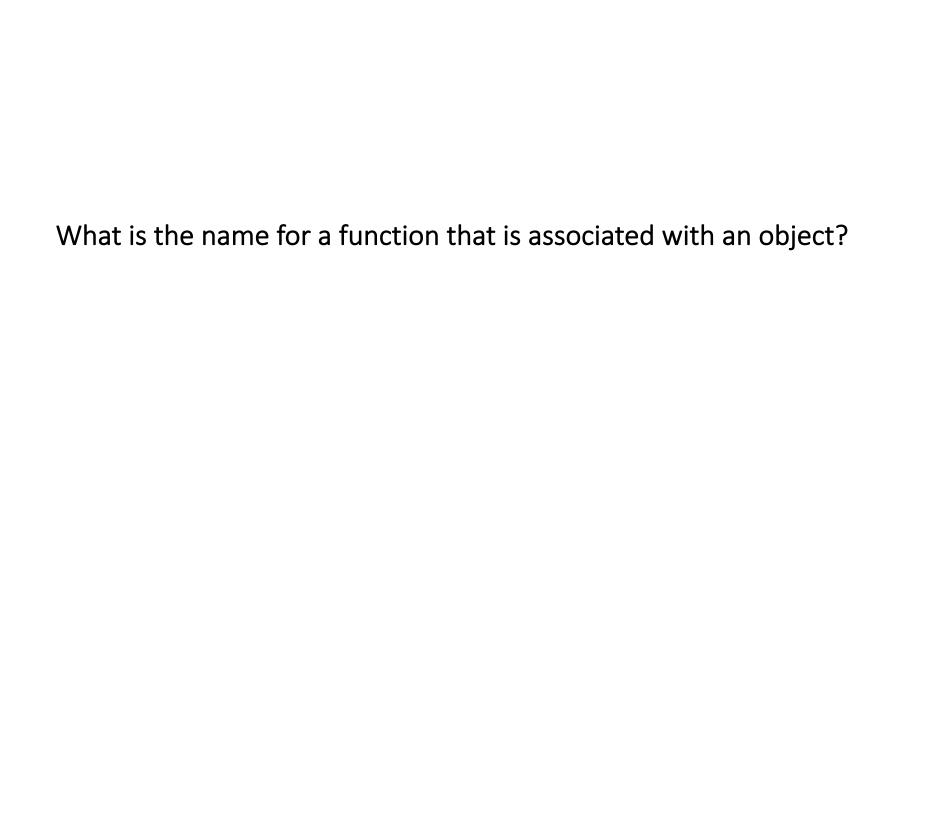
What are Python's three logical operators?

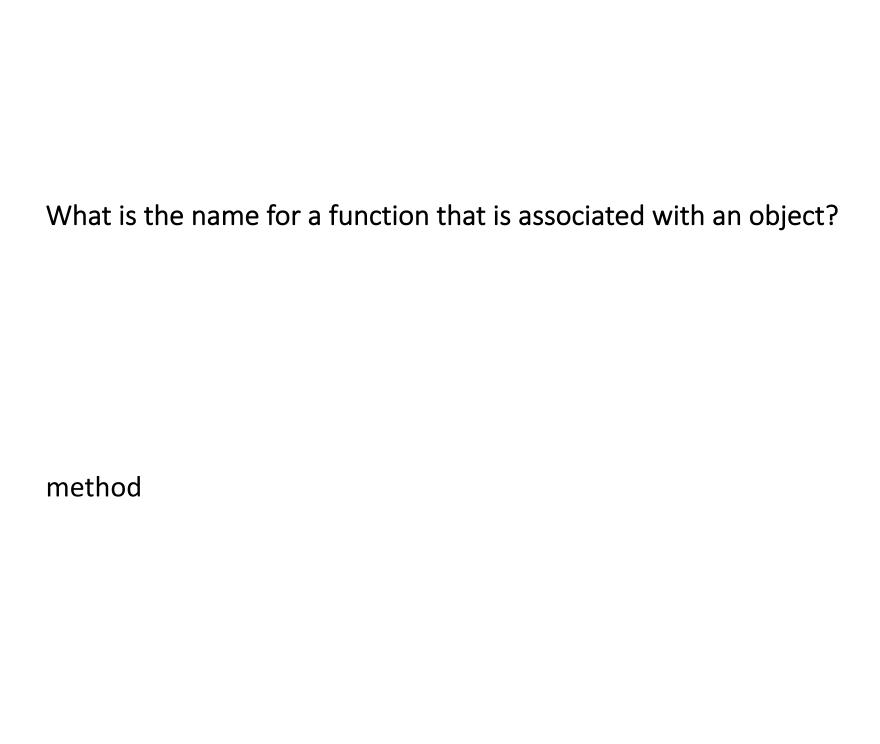
What are Python's three logical operators?

and

or

not





What is output by the code below?

```
>>> for num in range(25):
... print(str(num) + " % 25 = " + str(num%25))
...
```

What is output by the code below?

24 % 25 = 24

```
>>> for num in range(25):
... print(str(num) + " % 25 = " + str(num%25))
...

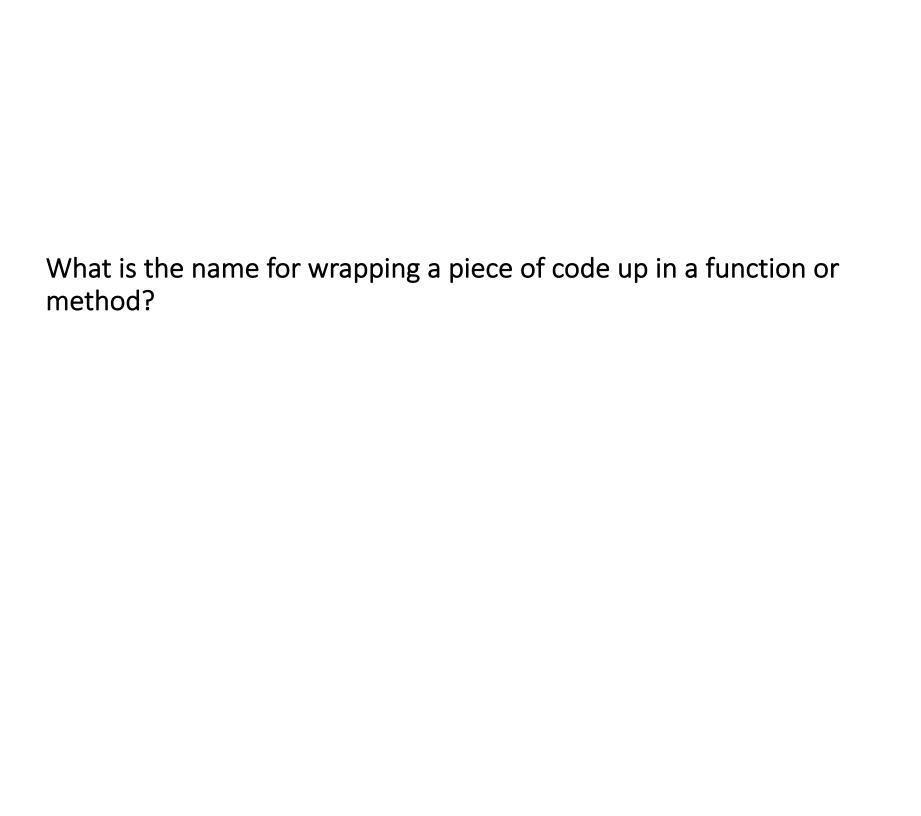
0 % 25 = 0
1 % 25 = 1
2 % 25 = 2
3 % 25 = 3
4 % 25 = 4
...
23 % 25 = 23
```

How can you use just two commands in the Python shell (or IDLE) to discover the other name for the turtle module's *It* method?

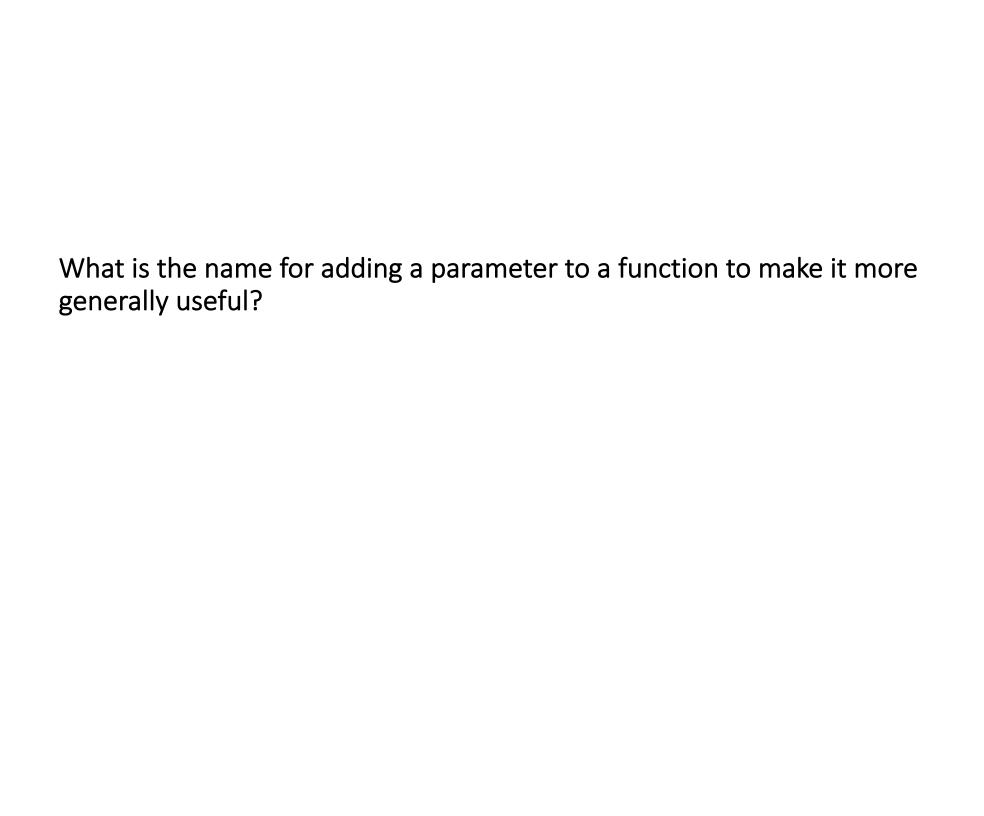
How can you use just two commands in the Python shell (or IDLE) to discover the other name for the turtle module's *It* method?

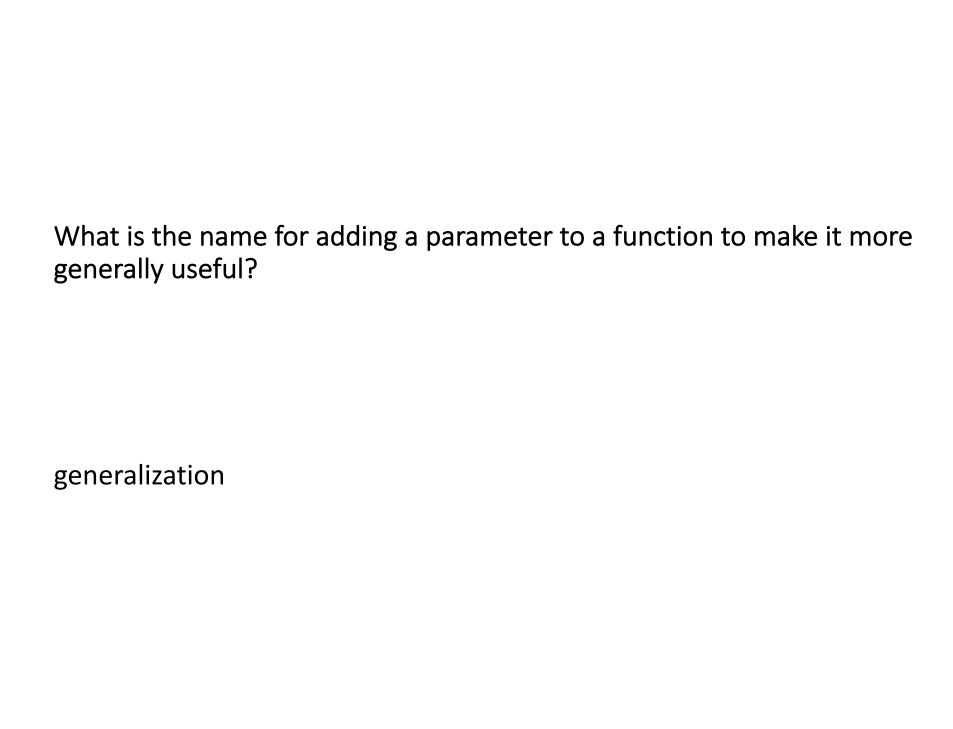
>>> import turtle

>>> help(turtle.lt)



What is the name for wrapping a piece of code up in a function or method? encapsulation





What are two names for mystery as it is used in the code below?

```
>>> mystery = """This function takes two arguments--one's height in
inches and one's weight in pounds. It then outputs the BMI (Body
Mass Index) corresponding to that height and weight, along with one
of four ratings: Underweight, Normal Weight, Overweight, or
Obesity."""
>>>
```

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>>>
```

Multiline string
Triple-quoted string

What is the term for a line of code like the second line below?

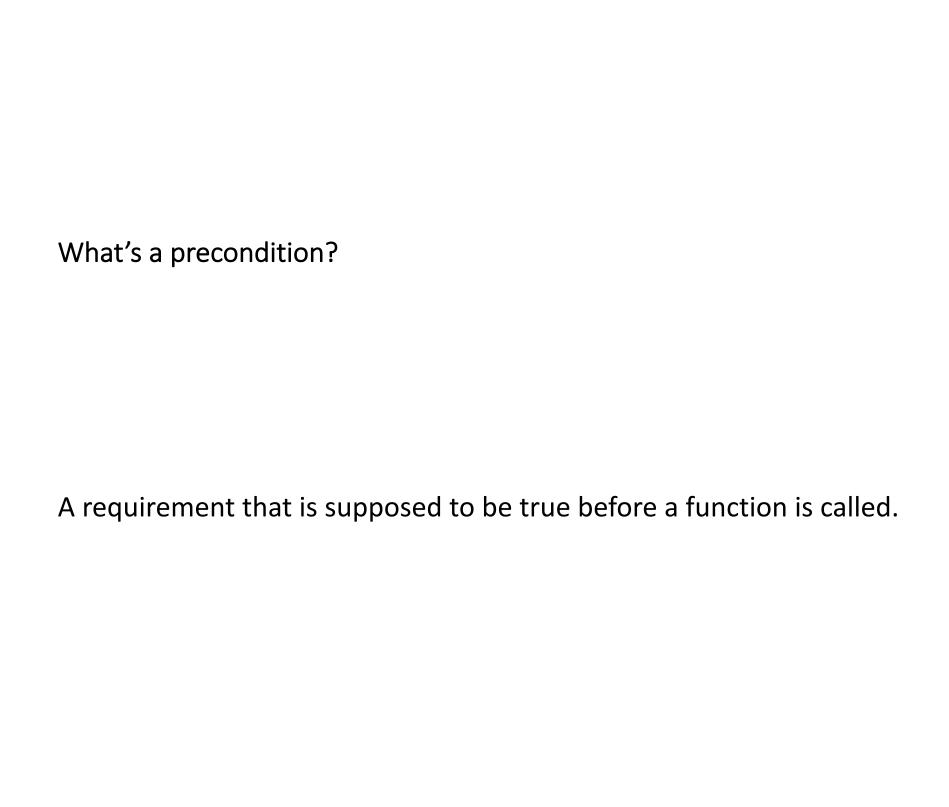
```
>>> def bmi(height,weight):
... """This function takes two arguments--one's height
in inches and one's weight in pounds. It then outputs
the BMI (Body Mass Index) corresponding to that height
and weight, along with one of four ratings: Underweight,
Normal Weight, Overweight, or Obesity."""
```

What is the term for a line of code like the second line below?

```
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Normal Weight, Overweight, or Obesity."""
```

Docstring (short for "document string")

What's a precondition?



What's a postcondition?

What's a postcondition?

A requirement that must be true after a function has been called and finished executing.

How could one use *keyword arguments* to call a function with this header?

def bmi(height, weight):

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def bmi(height, weight):

bmi(height=67.75, weight=155)

What does it mean to <i>refactor</i> one's code?	

What does it mean to refactor one's code?

Rewrite/rearrange it to improve it.

What's the name of the operator below?

>>> 151//3

What's the name of the operator below?

Floor division

What is the value of the following expression?

>>> 151//3

What is the value of the following expression?

50

>>>

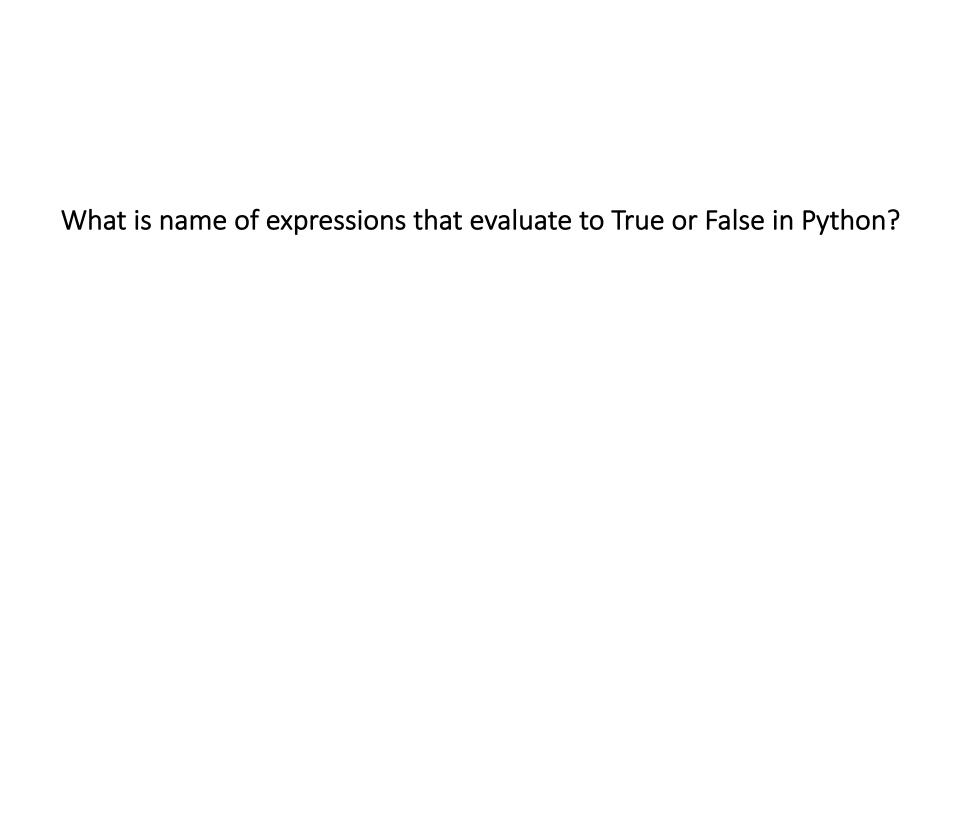
What is the value of the following expression?

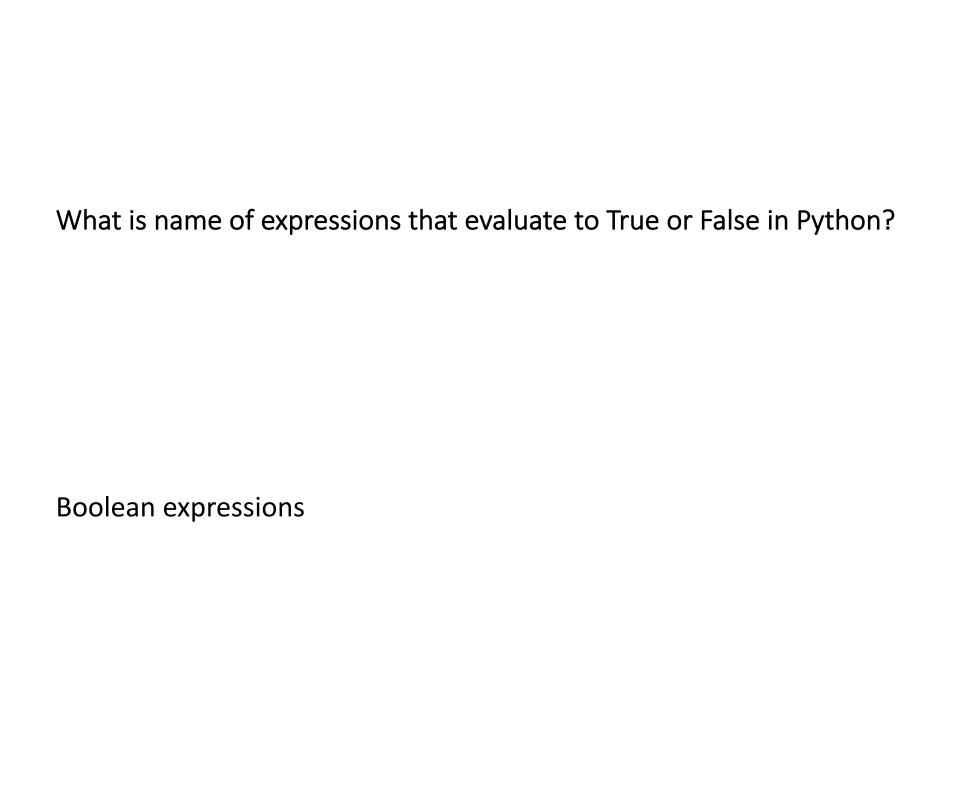
>>> 151/3

What is the value of the following expression?

>>> 151/3
50.33333333333333

>>>





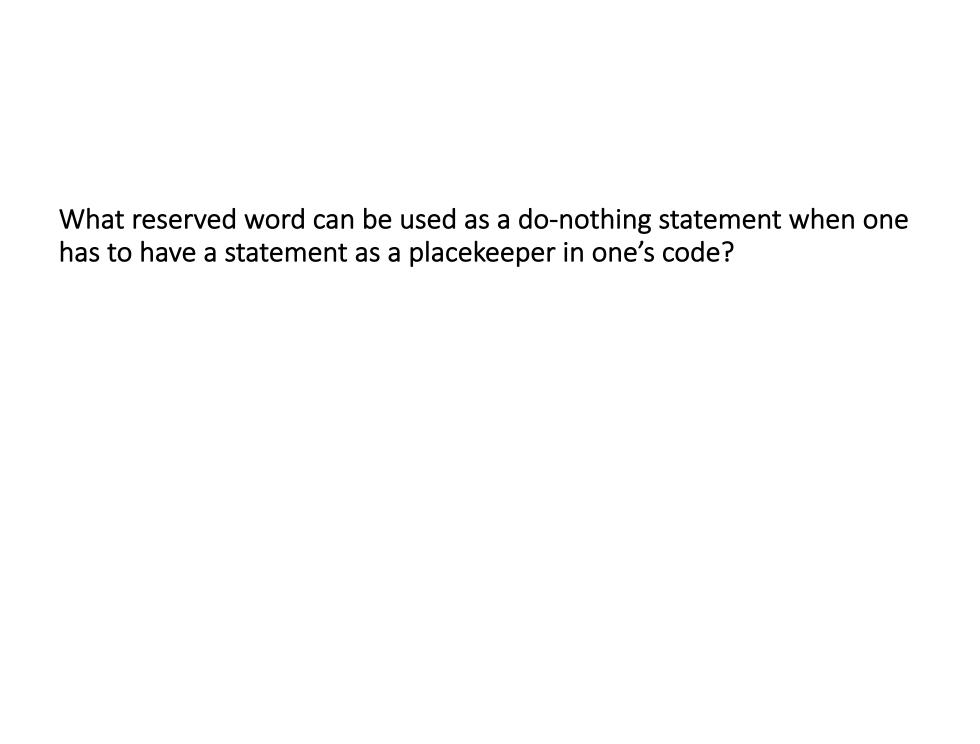
What's the diff between the two lines of code below?

What's the diff between the two lines of code below?

>>> a==16

The first one is an assignment statement that changes the value of variable a to 15.

The second one is a Boolean expression that evaluates to False.



What reserved word can be used as a do-nothing statement when one has to have a statement as a placekeeper in one's code?

```
pass
Example:
if (bmi >= 30):
   pass
```

What line of code would ask the user what day it was and store the answer in a variable?

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answer = input("What day of the week is today?")

What is Python's abbreviation for *else if* in chained conditional statements?

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elif