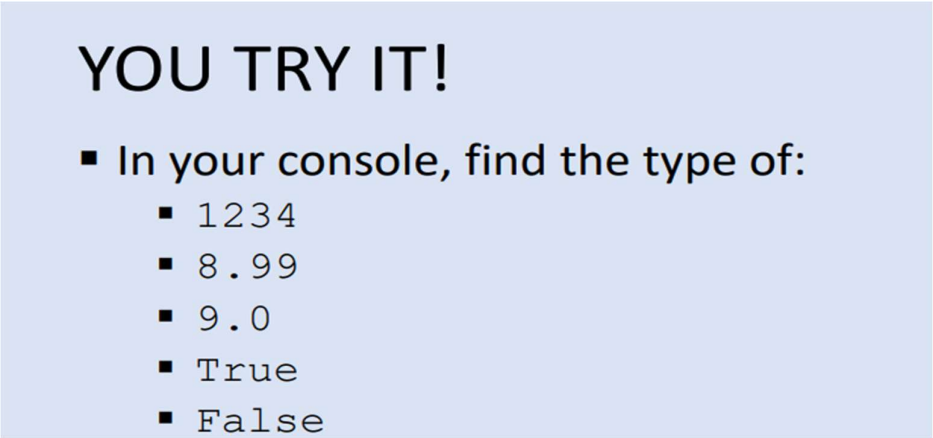
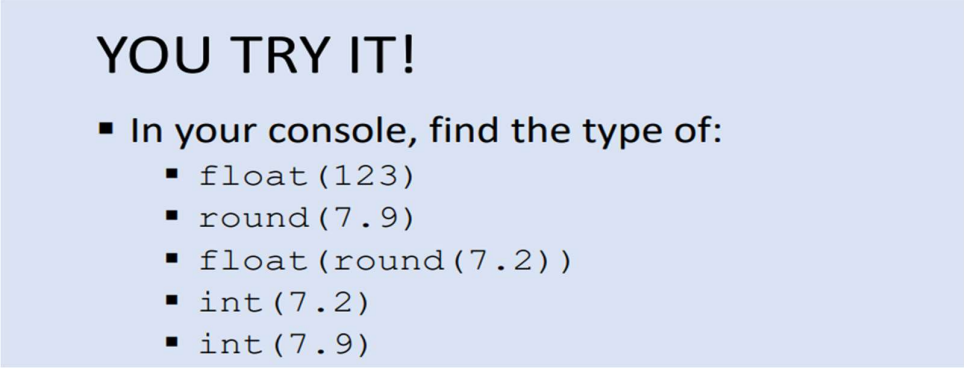
Find type of object:



ANSWER:

```
>>> type(1234)
<class 'int'>
>>> type(8.99)
<class 'float'>
>>> type(9.0)
<class 'float'>
>>> type(True)
<class 'bool'>
>>> type(False)
<class 'bool'>
```

Type Conversion:



ANSWER:

```
>>> float(123)
123.0
>>> round(7.9)
8
>>> float(round(7.2))
7.0
>>> int(7.2)
7
>>> int(7.9)
7
```

Expressions:

YOU TRY IT!

- In your console, find the values of the following expressions:
  - `(13-4) / (12*12)`
  - `type(4*3)`
  - `type(4.0*3)`
  - `int(1/2)`

ANSWER:

```
>>> (13-4)/(12*12)
0.0625
>>> type(4*3)
<class 'int'>
>>> type(4.0*3)
<class 'float'>
>>> int(1/2)
0
```

Variables:

YOU TRY IT!

- Which of these are allowed in Python? Type them in the console to check.
  - `x = 6`
  - `6 = x`
  - `x*y = 3+4`
  - `xy = 3+4`

ANSWER:

```
>>> x=6
>>> x
6
>>> 6=x
  File "<stdin>", line 1
SyntaxError: can't assign to literal
>>> x*y=3+4
  File "<stdin>", line 1
SyntaxError: can't assign to operator
>>> xy=3+4
>>> xy
7
```

Execution of code

YOU TRY IT!

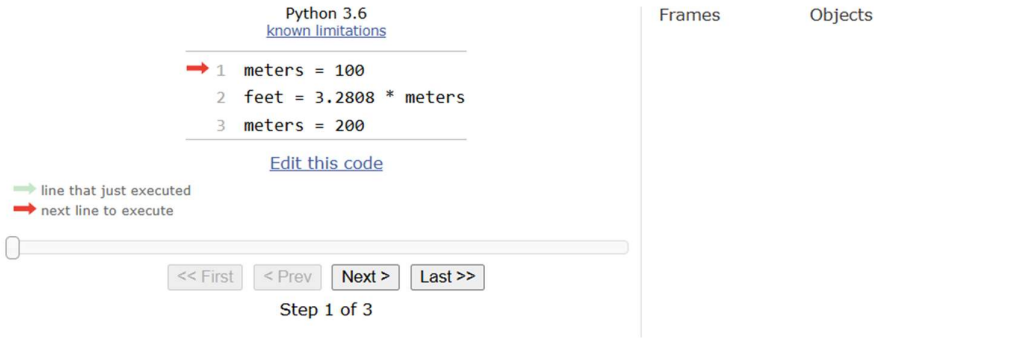
- These 3 lines are executed in order. What are the values of `meters` and `feet` variables at each line in the code?

```
meters = 100
feet = 3.2808 * meters
meters = 200
```

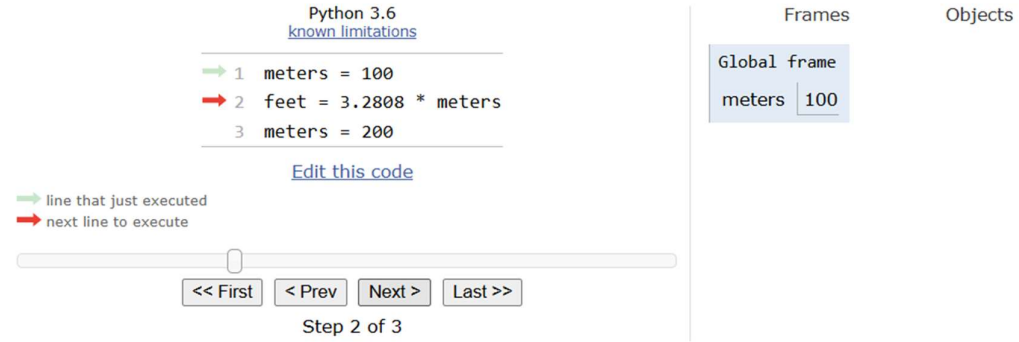
ANSWER:

Using Python tutor

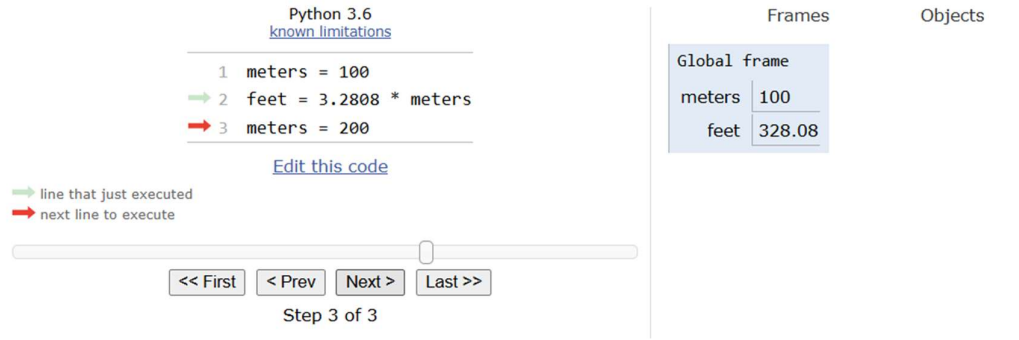
Step 1:



Step 2:

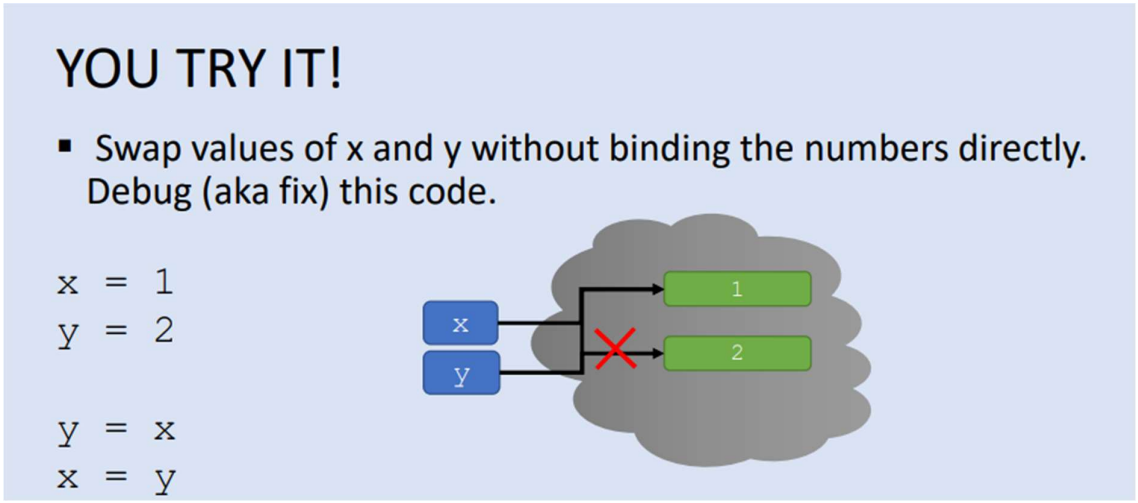


Step 3:



Step 4:

Swapping:



ANSWER:

Step 1:

Step 2:

Step 3:

Step 4: