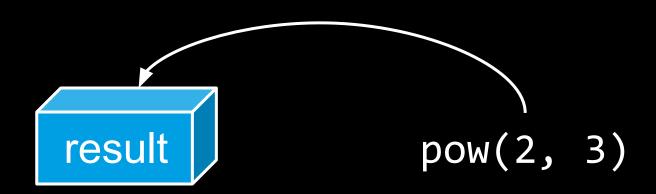
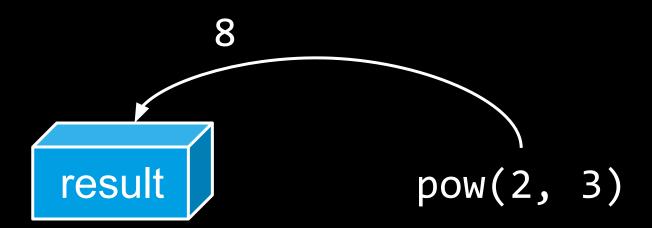
VARIABLES AND DATA TYPES

result





```
exp = 4
```

result = pow(2, exp)

```
exp = 4
result = pow(2, exp)
```

exp = 4

result = pow(2, exp)

print(result)

constants

PI = 3.14159 UID = "ZeW"

naming variables

english_and_speaking_names

start with small letter

use underscores for spaces

only 0123456789 and letters

operators

math

```
5 + 5
9 - 8
2 / 1
6 * 7
5 // 2
10 % 3
2**3
```

logic

```
2*2 >= 1+3
"A" < "B"
"A" < "B" and 2 == 1
"A" < "B" or 2 == 1
```

2 == 1

2*2 > 1+3

strings

```
== != > < >= <=
in / not in
[1] / [1:4]
strip()
capitalize()
title()
```

data types

integer

float

boolean

string

format strings

print(f"Hello {name}")

comments

step 1: determine exponent

step 2: calculate power

problem solving → problem decomposition

step 1: determine exponent

step 2: calculate power

step 1: determine exponent
exp = 4

step 2: calculate power

```
# step 1: determine exponent
exp = 4
```

```
# step 2: calculate power
result = pow(2, exp)
```

```
# step 1: determine exponent
exp = 4
```

step 2: calculate power
result = pow(2, exp)

step 3: print result
print(result)