



```
print ("5+10")
```

```
print (5+10)
```

```
print (My name is Nurlan)
```

```
print ("I'm ",10+4)
```

```
print ("I'm ", "10+4")
```

```
print ("Your new score is " 1030+10)
```



$$7+x=10$$

$$2x+3=9$$

$$3y-25=11$$

$$y+4=10$$





Variables

You will:

- learn purposes of variables;*
- learn how to input data;*
- solve problems in Python.*





Variables

Айнымалы





Object

Нысан





Syntax error

Синтаксистік қате





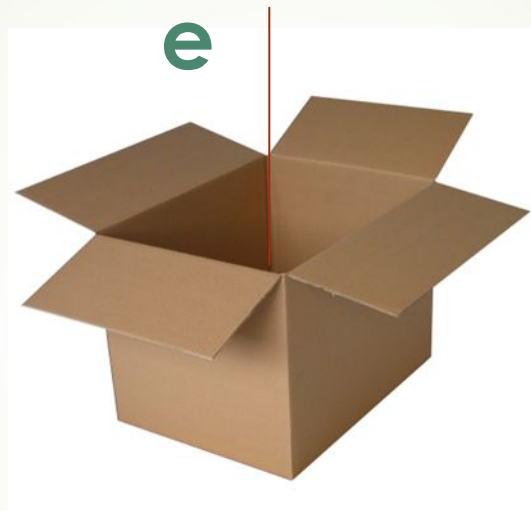
To modify

Өзгөртү

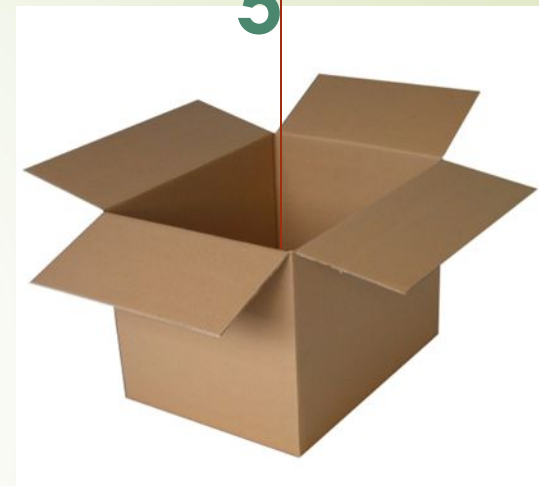
“Bob”



tru
e



3
5





Keep in mind

Variable's name can be a lowercase or uppercase letter or a word. Nevertheless, uppercase letters should not be used normally.

Variable's name is case sensitive. This can be confusing if a programmer is not expecting it.

In the code below, the output will be 6 (not 5) because there are two different variables:

x and X.

```
x = 6  
X = 5  
print(x)
```



Don't
Forget...

Example 1:



Code:

```
name = "Dias"  
print("My name is ", name)
```

Output:

```
My name is Dias
```

Example 2:

Code:

```
lives = 3  
print("Number of lives: ", lives)  
lives = lives + 1  
print("Number of lives: ", lives)
```

Output:

```
Number of lives: 3  
Number of lives: 4
```

Practice 1

1. Following codes have errors. Find and fix them.

a) `bandName="MuzArt"`

```
print(bandName, songs are very popular)
```

b) `bandName="MuzArt"`

```
print("bandName, is the most popular music  
band in Kazakhstan")
```

2. Complete the following code:

```
name=
```

```
surname=
```

```
print("My name is", )
```

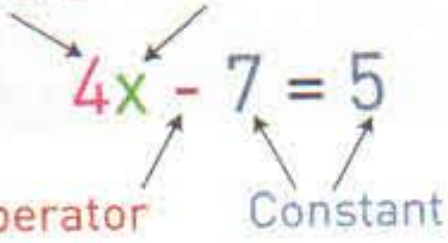
```
print( , )
```

Operators

Coefficient Variable

$$4x - 7 = 5$$

Operator Constant



A symbol for a number we do not know yet. It is usually a letter like x or y.

Example: in $x + 2 = 6$, x is the variable.

operator	operation	example equation	example code	result
+	addition	$3 + 2$	<code>a = 3 + 2</code>	<code>a = 5</code>
-	subtraction	$3 - 2$	<code>a = 3 - 2</code>	<code>a = 1</code>
*	multiplication	$3 \cdot 2$	<code>a = 3 \cdot 2</code>	<code>a = 6</code>
/	division	$\frac{10}{2}$	<code>a = 10 / 2</code>	<code>a = 5</code>
//	floor division	N/A	<code>a = 10 // 3</code>	<code>a = 3</code>
**	power	2^3	<code>a = 2 ** 3</code>	<code>a = 8</code>
%	modulus	N/A	<code>a = 8 % 3</code>	<code>a = 2</code>





Keep in mind

'Floor division'

always rounds an output down to the nearest value.

For example:

- $11//2$ is equal to 5, not 5.5.
- $99//100$ is equal to 0
- Modulus (%) is the remainder after division.

Ex: $8 \% 3 = 2$ $9 \% 2 = 1$



Practice using following expressions
in Python:

a) `a//b`

b) `a%b`

c) `a**2`

d) `a**b`





<https://quizizz.com/admin/quiz/5c4fe24bf94c0b001a67e377/variables>

Feedback



I understood everything



I have a question



I remember everything



I don't understand





<http://silentteacher.toxicode.fr/>

