

1. What typically calls an event handler?

1 / 1 балл

- ☒ Some code that you didn't write which generates the event.
- ☐ The code you write.

✓ Правильно  
Correct.

2. In CodeSkulptor, how many event handlers can be running *at the same time*?

1 / 1 балл

- ☐ Unlimited, i.e., 0 or more
- ☐ 0
- ☒ 1

✓ Правильно  
Correct.

3. What are the three parts of a frame?

1 / 1 балл

Refer to the video on SimpleGUI.

☒ Control Area

✓ Правильно

☐ Background Area

☐ Keyboard

☐ Title

☐ Mouse

☐ Border

☒ Canvas

✓ Правильно

☒ Status Area

✓ Правильно

☐ Options Area

4. For the SimpleGUI-based programs in this course, we recommended breaking down an interactive Python program into seven parts. Below, these parts are listed alphabetically.

1 / 1 балл

1. Create frame
2. Define classes
3. Define event handlers
4. Initialize global variables
5. Define helper functions
6. Register event handlers
7. Start frame and timers

However, in lecture, we recommended a particular ordering of these parts.

Enter 7 numbers in the range 1–7, separated only by spaces, to indicate the recommended ordering of the preceding elements of an interactive Python program. For example, if you think that the first action in your program should be to register your event handlers, enter 6 as the first number in the sequence.

4 5 2 3 1 6 7

✓ Правильно

5. Assume the following global definition is part of your program.

1 / 1 балл

```
1 x = 5
```

If each of the following function definitions are also part of your program, which of them **needs** a **global x** declaration? You can try each definition in [CodeSkulptor](#).

☐

```
1 def d(y):  
2     y = x + y  
3     return y
```

☐

```
1 def b(x,y):  
2     x = x + y  
3     return x
```

☒

```
3     return y
```

✓ Правильно

This example needs a global declaration. A global variable is assigned within a function, so you need a **global** declaration.

☐

```
1 def c(y):  
2     return x + y
```

6. Consider the following code.

1 / 1 балл

```
1 count = 0
2
3 def square(x):
4     global count
5     count += 1
6     return x**2
7
8 print square(square(square(square(3))))
```

What is the value of **count** at the end? Enter a number. (You can double check your answer in CodeSkulptor if you wish.)

4

✓ Правильно

Correct. Each time **square** is called the global variable **count** is increased by 1.

7. Consider the following code.

1 / 1 балл

```
1 a = 3
2 b = 6
3
4 def f(a):
5     c = a + b
6     return c
```

Which names occur in the global scope?

☒ **b**

✓ Правильно

☐ **c**

☒ **a**

✓ Правильно

☒ **f**

✓ Правильно

The function name **f** has global scope.

8. Consider the following code.

0 / 1 балл

```
1 a = 3
2 b = 6
3
4 def f(a):
5     c = a + b
6     return c
```

Which names occur in a local scope?

☐ b

☒ c

✓ Правильно

☐ f

☐ a

Вы выбрали не все правильные ответы

9. Which of the following are valid calls to `create_frame`?

1 / 1 балл

Look at the [documentation](#) for SimpleGUI frames, but also try the code in CodeSkulptor.

☐ 1 frame = simplegui.create\_frame(100, 100, 100)

☒ 1 f = simplegui.create\_frame("My Frame", 100, 100)

✓ Правильно

☐ 1 frame = simplegui.create\_frame(200, 200, 200, 200)

☒ 1 frame = simplegui.create\_frame("Testing", 200, 200, 300)

✓ Правильно

10. If the following is our entire program, what one line of code should replace the question marks for it to show a frame?

1 / 1 балл

```
1 ???  
2 f = simplegui.create_frame("My frame", 200, 200)  
3 f.start()
```

☐ 1 import simplegui.create\_frame

☐ 1 import create\_frame

☒ 1 import simplegui

✓ Правильно