Feedback — Quiz 8

Help Center

Thank you. Your submission for this quiz was received.

You submitted this quiz on **Tue 15 Mar 2016 9:39 PM PDT**. You got a score of **68.00** out of **100.00**. You can attempt again, if you'd like.

Question 1

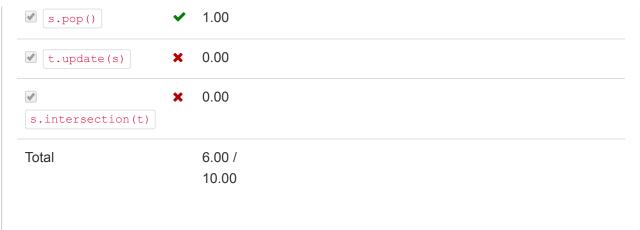
Which of the following is valid notation for a set in CodeSkulptor?

| Your Answer | | Score | Explanation |
|---------------------------------|---|------------------|--|
| set() | ~ | 4.00 | |
| [1,2,3] | ~ | 2.00 | While valid in Python 2.7 or 3.X, it is not valid in Python 2.6 or CodeSkulptor. |
| <pre> set([1, 2, 3]) </pre> | ~ | 4.00 | |
| Total | | 10.00 / 10.00 | |

Question 2

Which of the following operations can mutate set <a>s? You may want to try some examples in CodeSkulptor and refer to the documentation.

| Your Answer | | Score | Explanation |
|---------------|----------|-------|--|
| ✓ t.union(s) | × | 0.00 | |
| s.update(t) | ~ | 5.00 | |
| ✓ s.update(s) | × | 0.00 | While s.update() can change s, a set unioned with itself is just the same set. |



Question 3

Which of the following always give the same result as s.union(t)?

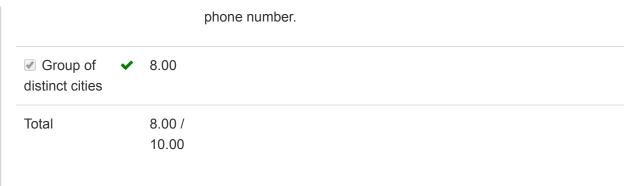
Refer to the CodeSkulptor documentation or try them on examples.

| Your Answer | | Score | Explanation |
|---|----------|--------------|-------------|
| <pre> t.union(t.difference(s)) </pre> | × | 0.00 | |
| <pre> ✓ t.union(s) </pre> | ~ | 4.00 | |
| s.intersection(s.union(t)) | ~ | 1.00 | |
| s.union(s.symmetric_difference(t)) | ~ | 4.00 | |
| Total | | 9.00 / 10.00 | |

Question 4

A set is an unordered collection of distinct elements. Which of the following problem contexts represent instances of this idea?

| Your Answer | | Score | Explanation |
|--------------------|---|-------|---|
| Alphabetized names | × | 0.00 | No, sets are not ordered. |
| ✔ Phonebook | × | 0.00 | While you could have a set of pairs, each with a name and phone number, there wouldn't be an easy way to look up a person's |

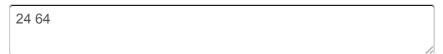


Question 5

How many frames per second are *typically* projected in modern movies? How many times per second is the draw handler typically called in CodeSkulptor?

Enter two numbers representing these frame rates in frames per second. Use only spaces to separate the numbers.

You entered:



| Your Answer | | Score | Explanation |
|-------------|----------|--------------|-------------|
| 24 | ~ | 5.00 | |
| 64 | × | 0.00 | |
| Total | | 5.00 / 10.00 | |

Question 6

The bonus portion of this week's mini-project defines and uses a **Sprite** class to support animations. Each animated sprite includes an associated tiled image, each of whose subimages are drawn in turn during the process of animating the sprite.

What attribute (also known as a field) of this <u>sprite</u> class can be used to select the appropriate sub-image to draw during this animation process? (If you are stuck, review the bonus phase in the mini-project description.)

| Your Answer | Score | Explanation |
|-------------|-------|-------------|
| | | |

| | 304.30.4 | |
|---------------------------------|---|--------|
| animated | | |
| <pre>• image</pre> | × 0.00 | |
| o image_center | | |
| O [vel] | | |
| sound | | |
| pos | | |
| age | | |
| angle | | |
| O [image_size] | | |
| O angle_vel | | |
| Olifespan | | |
| radius | | |
| Total | 0.00 / 10.00 | |
| | | |
| Question Explanation | | |
| Here is the text of the relevan | nt instruction from the bonus phase: "In the draw method | of the |
| | nimated is True. If so, then choose the correct tile in the | |
| | e is tiled horizontally. If self.animated is False, it sho | _ |

Question 7

continue to draw the sprite as before."

Consider a horizontally-tiled image where each sub-image has the same size. If each sub-image is of size 60×90 (in pixels), what is the horizontal distance (in pixels) between the centers of adjacent sub-images?

| Your Answer | | Score | Explanation |
|----------------------|---|-------|-------------|
| 60 | | | |
| 180 | | | |
| O 120 | | | |
| 90 | × | 0.00 | |

Total 0.00 / 10.00

Question 8

How many **distinct** numbers are printed by the following code? Enter the count.

```
def next(x):
    return (x ** 2 + 79) % 997

x = 1
for i in range(1000):
    print x
    x = next(x)
```

Hint: Consider how editing the code to use a set could help solve the question.

You entered:

46

| Your Answer | | Score | Explanation |
|-------------|---|---------------|-------------|
| 46 | ~ | 20.00 | |
| Total | | 20.00 / 20.00 | |

Question 9

Which instructor exhibits the best coding style?

| Your Answer | Score | Explanation |
|-----------------------|----------------|---|
| Stephen | | |
| Joe | | |
| John | ✓ 10.00 | John's programming tips are the best. We need to see more of him. |
| Scott | | |

| 0/03/2010 | | Coursera | |
|-----------|---------|----------|--|
| Total | 10.00 / | | |
| | 10.00 | | |
| | | | |
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