

Feedback — Quiz 8

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You submitted this quiz on **Tue 11 Nov 2014 3:25 PM WET**. You got a score of **92.00** 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
<input checked="" type="checkbox"/> <code>set([])</code>	✓ 4.00	
<input type="checkbox"/> <code>{1,2,3}</code>	✓ 2.00	While valid in Python 2.7 or 3.X, it is not valid in Python 2.6 or CodeSkulptor.
<input checked="" type="checkbox"/> <code>set([1, 2, 3])</code>	✓ 4.00	
Total	10.00 / 10.00	

Question 2

Which of the following operations can mutate set `s`? You may want to try some examples in CodeSkulptor and refer to the [documentation](#).





Your Answer	Score	Explanation
<input checked="" type="checkbox"/> <code>s.symmetric_difference(t)</code>	✗ 0.00	
<input type="checkbox"/> <code>s.discard(x)</code>	✗ 0.00	
<input checked="" type="checkbox"/> <code>t.union(s)</code>	✗ 0.00	

<input type="checkbox"/>	 0.00	
<code>s.intersection_update(t)</code>		
<input type="checkbox"/>	 1.00	While <code>s.update()</code> can change <code>s</code> , a set intersected with itself is just the same set.
<code>s.intersection_update(s)</code>		
<input type="checkbox"/>	 1.00	
<code>t.difference_update(s)</code>		
Total	2.00 / 10.00	

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
<input checked="" type="checkbox"/> <code>s.union(s.symmetric_difference(t))</code>	 4.00	
<input type="checkbox"/> <code>s.intersection(s.union(t))</code>	 1.00	
<input type="checkbox"/> <code>s.update(t)</code>	 1.00	
<input checked="" type="checkbox"/> <code>s.union(t.difference(s))</code>	 4.00	
Total	10.00 / 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
<input type="checkbox"/> Alphabetized names	 1.00	No, sets are not ordered.
<input type="checkbox"/>	 1.00	While you could have a set of pairs, each with a name and phone

Phonebook

number, there wouldn't be an easy way to look up a person's phone number.

☒ Rooms in a building  8.00

Total 10.00
/
10.00



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:

24 60

Your Answer		Score	Explanation
24		5.00	
60		5.00	
Total		10.00 / 10.00	

Question 6

For this week, the mini-project defines and uses a `Sprite` class to support animations.

What attribute (also known as a field) can be used to help index the sub-images forming an animated sprite? (If you are stuck, review the bonus phase in the mini-project description.)

Your Answer	Score	Explanation
<input type="radio"/> <code>lifespan</code>		

☐ angle

☐ sound

☐ image_center

☐ vel

☐ image

☒ age ✓ 10.00

☐ pos

☐ image_size

☐ radius

☐ angle_vel

☐ animated

Total 10.00 / 10.00

Question 7

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

☐ 90

☐ 120

☒ 60 ✓ 10.00

☐ 180

Total 10.00 / 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
<input type="radio"/> Stephen			
<input checked="" type="radio"/> Scott	✓	10.00	His code is well commented and well structured. And he wears awesome looking ties.
<input type="radio"/> John			
<input type="radio"/> Joe			
Total		10.00 / 10.00	

