

## Feedback — Lecture 3 Quiz

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Thank you. Your submission for this quiz was received.

You submitted this quiz on **Tue 8 Sep 2015 10:27 PM PDT**. You got a score of **10.00** out of **10.00**.

### Question 1

What data type is the object below?

```
[1e-10,(1,2),"BGP",[3]]
```

Your Answer	Score	Explanation
<input type="radio"/> Tuple		
<input checked="" type="radio"/> List	✓ 1.00	
<input type="radio"/> String		
<input type="radio"/> Set		
Total	1.00 / 1.00	

### Question 2

What is the value returned when the code below is executed:

```
>>> grades = [70,80.0,90,100]
```

```
>>> (grades[1]+grades[3])/2
```

Your Answer	Score	Explanation
<input checked="" type="radio"/> 90.0	✓ 1.00	
<input type="radio"/> 80.0		

☐ 90☐ 80

Total

1.00 / 1.00

## Question 3

Suppose `splice_site_pairs = ['GT-AG', 'GC-AG', 'AT-AC']`. What is `splice_site_pairs[:-1]` ?

Your Answer	Score	Explanation
<input checked="" type="radio"/> ['GT-AG', 'GC-AG']	✓ 1.00	
<input type="radio"/> ['GT-AG']		
<input type="radio"/> ['GT-AG', 'GC-AG', 'AT-AC']		
<input type="radio"/> ['AT-AC']		
Total	1.00 / 1.00	

## Question 4

We want to add a new element to a list variable L. The new element is stored in a variable e. What command do we use?

Your Answer	Score	Explanation
<input type="radio"/> L.insert(e)		
<input checked="" type="radio"/> L.append(e)	✓ 1.00	
<input type="radio"/> L = L + e		
<input type="radio"/> L.addEnd(e)		
Total	1.00 / 1.00	

## Question 5

Suppose `t = ('a', 'c', 'g', 't')`. What will be the output of the following code:

```
>>> t.append( ('A','C','G','T') )
```

```
>>> print len(t)
```

Your Answer	Score	Explanation
<input type="radio"/> 8		
<input checked="" type="radio"/> Error	✓ 1.00	
<input type="radio"/> 4		
<input type="radio"/> 1		
Total	1.00 / 1.00	

## Question 6

What is the result of the print function in the following Python 3.xx code:

```
dna=input("Enter DNA sequence:")
```

```
dna_counts={'t':dna.count('t'),'c':dna.count('c'),'g':dna.count('g'),'a':dna.count('a')}
```

```
nt=sorted(dna_counts.keys())
```

```
print(nt[-1])
```

Your Answer	Score	Explanation
<input type="radio"/> 'c'		
<input type="radio"/> error		
<input type="radio"/> 'a'		
<input checked="" type="radio"/> 't'	✓ 1.00	
Total	1.00 / 1.00	

## Question 7

To delete an entry with the key 'a' from the dictionary `dna_counts={'g': 13, 'c': 3, 't': 1, 'a': 16}` what command do we use:

Your Answer	Score	Explanation
<input checked="" type="radio"/> <code>del dna_counts['a']</code>	✓ 1.00	
<input type="radio"/> <code>dna_counts[-1]=''</code>		
<input type="radio"/> <code>dna_counts.delete('a':16)</code>		
<input type="radio"/> <code>dna_counts['a']=''</code>		
Total	1.00 / 1.00	

## Question 8

Suppose `dna` is a string variable that contains only 'a','c','g' or 't' characters. What Python code below can we use to find the frequency (`max_freq`) of the most frequent character in string `dna`?

Your Answer	Score	Explanation
<input type="radio"/> <pre>dna_counts={'t':dna.count('t'),'c':dna.count('c'),'g':dna.count('g'),'a':dna.count('a')}  max_freq=dna_counts.sort()[-1]</pre>		
<input checked="" type="radio"/> <pre>dna_counts={'t':dna.count('t'),'c':dna.count('c'),'g':dna.count('g'),'a':dna.count('a')}  max_freq=sorted(dna_counts.values())[-1]</pre>	✓ 1.00	
<input type="radio"/>		

```
dna_counts={'t':dna.count('t'),'c':dna.count('c'),'g':dna.coun
t('g'),'a':dna.count('a')}
```

```
max_freq=sorted(dna_counts.values())
```



```
dna_counts={'t':dna.count('t'),'c':dna.count('c'),'g':dna.coun
t('g'),'a':dna.count('a')}
```

```
max_freq=sorted(dna_counts.values())[0]
```

Total

1.00 /

1.00

## Question 9

Suppose L1 and L2 are two list variables. What does the list variable L3 = list(set(L1)&set(L2)) contain?

Your Answer

Score

Explanation



All elements in lists L1 and L2



All elements common between lists L1 and L2 without duplicates



1.00



A list of two sets: one set with the elements of list L1, and another set with the elements of L2



A list of sets formed with the elements of lists L1 and L2

Total

1.00 /

1.00

## Question 10

How many elements are in the dictionary someData after the following code has been executed?

```
someData = { }
```

```
someData['cheese'] = 'dairy'
```

```
someData['Cheese'] = 'dairy'
```

```
someData['Cheese'] = 'Dairy'
```

```
someData['cheese'] = 'Dairy'
```

Your Answer	Score	Explanation
<input type="radio"/> 0		
<input type="radio"/> 1		
<input type="radio"/> 4		
<input checked="" type="radio"/> 2	✓ 1.00	
Total	1.00 / 1.00	