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TO PASS 70% or higher

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## Lecture 3 Quiz

LATEST SUBMISSION GRADE

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1. What data type is the object below?

1 / 1 point

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

- ☒ List
- ☐ Tuple
- ☐ String
- ☐ Array

✓ **Correct**

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

1 / 1 point

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

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

- ☐ 85.0
- ☒ 90.0
- ☐ 90
- ☐ 80

✓ **Correct**

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

1 / 1 point

- ☒ ['GT-AG', 'GC-AG']
- ☐ ['GT-AG','GC-AG','AT-AC']
- ☐ ['GT-AG']
- ☐ ['AT-AC']

✓ **Correct**

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?

1 / 1 point

- ☐ L.addEnd(e)
- ☒ L.append(e)
- ☐ L.addLast(e)
- ☐ L.add(e)

✓ **Correct**

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

1 / 1 point

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

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

- ☐ 5
- ☐ 8
- ☒ Error
- ☐ 1

✓ Correct

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

1 / 1 point

```
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])
```

☐ 'g'

☐ 'c'

☐ 4

☒ 't'

✓ Correct

7. To delete an entry with the key 'a' from the dictionary dna\_counts={'g': 13, 'c': 3,

1 / 1 point

't': 1, 'a': 16} what command do we use:

☐ dna\_counts["a"]="

☐ dna\_counts.delete('a':16)

☐ dna\_counts[-1]="

☒ del dna\_counts["a"]

✓ Correct

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?

1 / 1 point

- ☐

```
1 dna_counts=
2 {'t':dna.count('t'),'c':dna.count('c'),'g':dna.count('g'),'a':dna.count('a')}
3
4 max_freq=sorted(dna_counts.keys())[-1]CODE
```
- ☒

```
1 dna_counts=
2 {'t':dna.count('t'),'c':dna.count('c'),'g':dna.count('g'),'a':dna.count('a')}
3
4 max_freq=sorted(dna_counts.values())[-1]
```
- ☐

```
1 dna_counts=
2 {'t':dna.count('t'),'c':dna.count('c'),'g':dna.count('g'),'a':dna.count('a')}
3
4 max_freq=dna_counts.sort()[-1]
```
- ☐

```
1 dna_counts=
2 {'t':dna.count('t'),'c':dna.count('c'),'g':dna.count('g'),'a':dna.count('a')}
3
4 max_freq=sorted(dna_counts.values())[0]
```

✓ Correct

9. Suppose L1 and L2 are two list variables. What does the list variable

1 / 1 point

L3 = list(set(L1)&set(L2)) contain?

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

☒ All elements common between lists L1 and L2 without duplicates

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

☐ All elements in lists L1 and L2

✓ Correct

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

1 / 1 point

```
1 someData = { }  
2 someData['cheese'] = 'dairy'  
3 someData['Cheese'] = 'dairy'  
4 someData['Cheese'] = 'Dairy'  
5 someData['cheese'] = 'Dairy'
```

- ☐ 0
- ☐ 3
- ☒ 2
- ☐ Can't say - an error message was issued.

✓ Correct