1 point

1. What is the result of the following operation in Python: 17/2 ?

- 8 or 8.5, depending on the Python version
- 9
- 8.0
- 9.0

---

1 point

2. Given the following code in Python:

```
>>> mydna = 'acgt'
>>> mydna = mydna + mydna
```

What will be the result of typing the following at the Python interpreter prompt:

>>> myDna

- ' '
- 'acgt'
- 'ACGTACGT'
- an error message

---

1 point

3. The following commands are entered at the prompt of Python interpreter.

```
>>> dna="atgctggggact"
>>> dna[:3]
>>> dna
```

What will be the output of the last command?

- 'gctggggact'
- 'atgctggggact'
- 'ctggggact'
- 'at'

---

1 point

4. What is the output of 'dna'+1+2+3 ?

- dna6
- dna
- Error
- dna123

---

1 point

5. Given a string variable called dna, for instance:

>>> dna='agcagttagcta'

What is a correct way to count the number of occurrences of 'ag' in dna:

- dna.count('ag')
- dna.count('a')+dna.count('g')
- dna.count('a')+dna.count('A')+dna.count('g')+dna.count('G')
- count(dna,'a')+count(dna,'g')

---

1 point

6. What is the value of the variable seqlen, after the following code is entered in Python:

```
1  >>> seqlen = '10bp'
2  >>> seqlen='2'+seqlen
3  >>> seqlen=seqlen*2
```

- '12bp12bp'
- '1010bp'
- '10bp'
- '210bp210bp'

---

1 point

7. You wish to display the following text using the print function in Python:

```
1  >HSBGPG Human bone gla gene\transcript "BGP"
2  GGCAGATTCCCCCTAGACODE
```

Select the correct way to display this output in Python 3.xx:

- print(">HSBGPG Human bone gla gene\transcript "BGP"\nGGCAGATTCCCCCTAGA")
- print("""\

  >HSBGPG Human bone gla gene\transcript "BGP"

  GGCAGATTCCCCCTAGA

  """)
- print('>HSBGPG Human bone gla gene\transcript "BGP"

  GGCAGATTCCCCCTAGA')
- print('>HSBGPG Human bone gla gene\\transcript "BGP"\nGGCAGATTCCCCCTAGA')

---

1 point

8. A student is writing Python 3.xx code to read in a dna sequence using the following command:

>>> dna=input("Enter a DNA sequence, please:")

The student tries three different ways to compute the index of the second occurrence of the string 'atg' in the dna sequence:

```
A.

>>> o1 = dna.find('atg')
>>> dna.find('atg',o1+1)

B.

>>> dna.rfind('atg')

C.
>>> dna.find('atg',dna.find('atg')+1)
```

Which of these ways is correct:

- A
- B
- None of these
- A or C

---

1 point

9. What are the types of the following literals, in order?

1, 1., 1.0, 1e10, 0x12,"1", "1.0", 100000000000000000, 100000000000000000.0

- int, float, float, float,int,str,str,int,float
- int, float, float, float, hex, int, float, int, float
- int, no type (error), float, float, hex, string, string, int, float
- int, no type (error), float, double, int, string, string, long, double

---

1 point

10. What is the result of int(4+6/2+2*2)?

- 14.0
- 11
- 14

- 9

1 point

11. What is the difference between the expressions val = 1234567 and val = 1.234567 * 10 ** 6?

- The value of the variable val in the first expression is different from the value of the variable val in the second expression.
- The two values are not equal.
- No difference.
- In the first expression val is of type int, in the second val is of type float. Numerical values are different.
- In the first expression val is of type int, in the second val is of type float. Numerical value is the same.

Lecture 2 Quiz

Quiz, 12 questions

1 point

12. What are the values of the variables a, b, c and d after the following statements have been executed?

```
a=1
b=2
c=a+b
a = b
a = c
d=a+c
```

- a will be 3, b will be 2, c 3 and d 6.
- a will be 1, b will be 2, c 3 and d 4.
- a will be 1, b will be 2, c 3 and d 6.
- a will be 2, b will be 2, c 3 and d 4.

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