



✓ **Congratulations! You passed!**

TO PASS 70% or higher

Keep Learning

Retake the assignment in 7h 57m

GRADE
100%

Lecture 2 Quiz

LATEST SUBMISSION GRADE

100%

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

1 / 1 point

- ☒ 8 or 8.5, depending on the Python version
- ☐ 8.0
- ☐ 8.5
- ☐ 8

✓ **Correct**

2. Given the following code in Python:

1 / 1 point

```
1 >>> mydna = 'acgt'  
2 >>> mydna = mydna + mydna
```

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

>>> myDna

- ☐ no output
- ☐ 'acgtacgt'
- ☐ 'ACGTACGT'
- ☒ an error message

✓ **Correct**

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

1 / 1 point

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

What will be the output of the last command?

- ☐ 'ctggggact'
- ☐ 'at'
- ☒ 'atgctggggact'
- ☐ 'gctggggact'

✓ **Correct**

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

1 / 1 point

- ☐ 'dna123'
- ☐ 'dna'
- ☒ Error
- ☐ dna

✓ **Correct**

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

1 / 1 point

>>> dna='agcagttagcta'

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

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

✓ Correct

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

1 / 1 point

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

- ☒ '210bp210bp'
- ☐ '24bp'
- ☐ '1010bp'
- ☐ '10bp'

✓ Correct

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

1 / 1 point

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

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

- ☐ print(>HSBGPG Human bone gla gene\transcript "BGP"
GGCAGATCCCCCTAGA')
- ☒ print(>HSBGPG Human bone gla gene\transcript "BGP"\nGGCAGATCCCCCTAGA')
- ☐ print(">HSBGPG Human bone gla gene\transcript "BGP"\nGGCAGATCCCCCTAGA')
- ☐ print(">HSBGPG Human bone gla gene\transcript "BGP"\nGGCAGATCCCCCTAGA")

✓ Correct

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

1 / 1 point

```
>>> 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:

```
1 A.
2
3 >>> o1 = dna.find('atg')
4 >>> dna.find('atg',o1+1)
5
6 B.
7
8 >>> dna.rfind('atg')
9
10 C.
11 >>> dna.find('atg',dna.find('atg')+1)
```

Which of these ways is correct:

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

✓ Correct

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

1 / 1 point

1, 1., 1.0, 1e10, 0x12,"1", "1.0", 10000000000000000, 10000000000000000.0

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

✓ Correct

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

1 / 1 point

- ☐ 9
- ☐ 9.0
- ☒ 11
- ☐ 11.0

✓ Correct

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

1 / 1 point

- ☒ In the first expression `val` is of type `int`, in the second `val` is of type `float`. Numerical value is the same.
- ☐ 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.
- ☐ In the first expression `val` is of type `int`, in the second `val` is of type `float`. Numerical values are different.
- ☐ No difference.

✓ Correct

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

1 / 1 point

`a=1`

`b=2`

`c=a+b`

`a = b`

`a = c`

`d=a+c`

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

✓ Correct