

1. Python is an example of an

1 / 1 point

- ☒ Interpreted language
- ☐ Declarative language
- ☐ Operating system language
- ☐ Data science language
- ☐ Low level language

✓ Correct

This material was covered in the "Python Functions" lecture.

2. Data Science is a

1 / 1 point

- ☐ Branch of statistics
- ☐ Branch of computer science
- ☐ Branch of artificial intelligence
- ☒ Interdisciplinary, made up of all of the above

✓ Correct

This material was covered in the "Data Science" lecture.

3. **Data visualization is not a part of data science.**

1 / 1 point

- ☐ True
- ☒ False



**Correct**

This material was covered in the "Data Science" lecture.

4. **Which bracketing style does Python use for tuples?**

1 / 1 point

- ☐ {}
- ☒ ()
- ☐ []



**Correct**

This material was covered in the "Python Types and Sequences" lecture.

5. **In Python, strings are considered Mutable, and can be changed.**

1 / 1 point

- ☒ False
- ☐ True

6. What is the result of the following code: `['a', 'b', 'c'] + [1, 2, 3]`

1 / 1 point

- ☒ `['a', 'b', 'c', 1, 2, 3]`
- ☐ `TypeError: Cannot convert list(int) to list(str)`
- ☐ `['a1', 'b2', 'c3']`
- ☐ `[['a', 'b', 'c'], [1, 2, 3]]`

✓ Correct

This material was covered in the "Python Types and Sequences" lecture.

7. String slicing is

1 / 1 point

- ☐ A way to make string mutable in python
- ☐ A way to reduce the size on disk of strings in python
- ☒ A way to make a substring of a string in python

✓ Correct

This material was covered in the "Python More on Strings" lecture.

8. When you create a lambda, what type is returned? E.g. `type(lambda x: x+1)` returns

1 / 1 point

- ☒ `<class 'function'>`
- ☐ `<class 'type'>`
- ☐ `<class 'int'>`
- ☐ `<class 'lambda'>`

✓ Correct

This material was covered in the "Advanced Python Lambda and List Comprehensions" lecture.

9. The epoch refers to

1 / 1 point

- ☐ January 1, year 0
- ☒ January 1, year 1970
- ☐ January 1, year 1980
- ☐ January 1, year 2000

✓ Correct

This material was covered in the "Python Dates and Times" lecture.

10. This code, `[x**2 for x in range(10)]`, is an example of a

1 / 1 point

- ☒ List comprehension
- ☐ Sequence comprehension
- ☐ Tuple comprehension
- ☐ List multiplication

✓ Correct

This material was covered in the "Advanced Python Lambda and List Comprehensions" lecture.

11. Given a 6x6 NumPy array r, which of the following options would slice the shaded elements?

1 / 1 point

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 0  | 1  | 2  | 3  | 4  | 5  |
| 6  | 7  | 8  | 9  | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | 32 | 33 | 34 | 35 |

- ☒ `1` `r.reshape(36)[::7]`
- ☐ `1` `r[:,::7]`
- ☐ `1` `r[0:6,::-7]`
- ☐ `1` `r[:,::7]`

☐

|   |                     |
|---|---------------------|
| 1 | <code>r[::7]</code> |
| 2 |                     |



**Correct**

You could also use `np.diag(r)`. This material was covered in "Advanced Python Demonstration: The Numerical Python Library (NumPy)"

12. Given a 6x6 NumPy array `r`, which of the following options would slice the shaded elements?

1 / 1 point

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 0  | 1  | 2  | 3  | 4  | 5  |
| 6  | 7  | 8  | 9  | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | 32 | 33 | 34 | 35 |

☐

|   |                           |
|---|---------------------------|
| 1 | <code>r[2::2,2::2]</code> |
| 2 |                           |

- ☐

```
1 r[2::2,2::2]
2
```
- ☐

```
1 r[[2,3],[2,3]]
2
```
- ☐

```
1 r[:,2,::2]
2
```
- ☒

```
1 r[2:4,2:4]
2
```



**Correct**

This material was covered in "Advanced Python Demonstration: The Numerical Python Library (NumPy)"