

1

Multiple Answer 1 point

Which of the following are valid ways to run lines of Python code?

- ☐ From within the GitHub website, by clicking on a Jupyter notebook.
- ☒ From the command line, by typing in `python`, pressing return, and then interactively entering the lines.
- ☒ From within a code cell in a Jupyter notebook running on Jupyter Lab.
- ☒ From a text file, with a `.py` extension. as an argument to calling Python from the command line.

2

Multiple Choice 1 point

What statement best describes the difference between data types and data structures?

- ☐ There is no real difference; the expressions are interchangeable.
- ☒ Data types refer to primitive kinds of data, whereas data structures organize data types into collections with specific organizational properties.
- ☐ Data types refer to built-in objects, whereas data structures are imported.
- ☐ Data types don't have associated operators, whereas data types do.

3

Multiple Answer 1 point

Which of the following items have corresponding Python data types?

- ☒ Integers
- ☒ Booleans
- ☐ Characters (e.g. individual letters)
- ☒ Reals

4

Multiple Choice 1 point

What built-in Python function returns the object type (i.e. class name) of a value stored in the Python variable `x`?

- ☐ `class(x)`
- ☒ `type(x)`
- ☐ `id(x)`
- ☐ `ord(x)`

5

Multiple Answer 1 point

Which of the following literals would Python interpret as integers?



1



1.

`"1"``+1`

6

True or False 1 point

What value does the following expression return:

```
int(1.) == 1
```



True



False

7

Multiple Answer 1 point

Which are valid constructors of a Python list named `x`?

`x = []``x = list()``x = ()``x = {}`

Given the list

```
x = [1, 2, 4, 8]
```

what will the expression the following evaluate to?

```
x[1:4]
```

☐

```
[1, 2, 4, 8]
```

☒

```
[2, 4, 8]
```

☐

```
[1, 2, 4]
```

☐

```
[1, 4]
```

What value will the following expression evaluate to?

`[1, 2, 4] * 2`

☐

`[2, 4, 8]`

☐

None # The `*` operator does not work with lists

☒

`[1, 2, 4, 1, 2, 4]`

☐

`[1, 2, 4, 2]`

10

Multiple Answer 1 point

Which of the following are built-in Python data structures?

- ☒ list
- ☒ dict
- ☒ set
- ☒ tuple