

## Your grade: 100%

Your latest: 100% • Your highest: 100% • To pass you need at least 80%. We keep your highest score.

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1. Which of the following is something you would likely produce in the Explore step of the OSEMN process?

1 / 1 point

- Reports
- Supportive data
- Presentations
- Visualizations

 **Correct**

That's correct! In the Explore step of the OSEMN process, you use statistics and visualizations to better understand the data.

2. In Python, what are variables?

1 / 1 point

- Formulas used to manipulate data
- Data used with a method to change an outcome
- Randomized information produced with the random() function
- Labels to containers of stored information

 **Correct**

That's correct! You can think of Python variables as "labels" pointing to where data is stored and these variables can be "relabeled" to easily access data.

3. What type is the variable `days_without_rain`?

1 / 1 point

```
days_without_rain = 312
```

- LargeNum
- Boolean
- Integer
- String

 **Correct**

That's correct! Integers are defined by whole numbers. Python's most basic and common types are string, integer, float, boolean, and NoneType.

4. Given the following code snippet, how can we "cast" or change the data type of the string value to a float?

1 / 1 point

- ```
math_grade = "100"
```
- `bool(math_grade)`
  - `int(math_grade)`
  - `str(math_grade)`
  - `float(math_grade)`

 **Correct**

That's correct! The float() function is used for casting data types to a float.

5. A data analyst is working with a list of store locations in Python. Examine this code and select the expected output:

1 / 1 point

```
store_locations = ['ATL', 'AUS', 'CHI', 'NYC', 'SFO']
```

- ```
store_locations[0]
```
- 'ATL'
  - `IndexError`
  - None
  - 'SFO'

 **Correct**

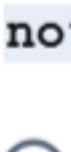
That's correct! When accessing data in a list, indexing can be used to return a single element, and the index of zero is the first item in the list.

6. A data analyst is working with a list of ice cream flavors in Python. Examine this code and select the expected output:

1 / 1 point

```
ic_flavors = ['ChocChip', 'Van', 'Choc', 'MintChip', 'Straw']
```

- ```
ic_flavors[0: ]
```
- ['MintChip', 'Straw']
  - ['ChocChip']
  - ['ChocChip', 'Van', 'Choc', 'MintChip', 'Straw']
  - ['Van', 'Choc', 'MintChip', 'Straw']

 **Correct**

That's correct! When accessing data in a list, slicing will return multiple values from a list.

7. A data analyst is working with a dictionary of dog breed sizes in Python. Examine this code and select the expected output:

1 / 1 point

```
dog_size = { 'lab': 'medium', 'terrier': 'small', 'great dane': 'large',  
'chihuahua': 'xsmall' }
```

- ```
dog_size['lab']
```
- 'medium'
  - `DictionaryError`
  - 'xsmall'
  - 'lab': 'medium'

 **Correct**

That's correct! When accessing data in a dictionary, you need to provide the key associated with a value.

8. A data analyst is working with a list of the most popular items at a restaurant in Python. Examine this code and select the expected output:

1 / 1 point

```
pop_items = ['hot dog', 'hamburger', 'pizza', 'calzone', 'salad', 'water']
```

- ```
not ('soda' in pop_items)
```
- No
  - False
  - True
  - 'drink'

 **Correct**

That's correct! Using the membership operator "in" is a quick way to check whether an element is in a list.

9. You are working on a data analysis project for an airline. You've decided to use if, elif, and else clauses to sort passengers by how often they fly. You have written the following code:

1 / 1 point

```
annual_flights = 8
```

- ```
if annual_flights >= 10:  
    print('Frequent Flier')
```

- ```
elif annual_flights >= 5:  
    print('Occasional Flier')
```

```
else:
```

- ```
    print('Standard Flier')
```

What would you expect the output of this code to be?

- Standard Flier
- Frequent Flier
- Occasional Flier
- You get an error message

 **Correct**

That's correct! Using the if, else, and elif clauses, data can be sorted using conditional statements.

10. A key-value pair is used in which of the following data types?

1 / 1 point

- Dictionaries
- Methods
- Lists
- Variables

 **Correct**

That's correct! A dictionary contains data contained in a connected pair called a key value pair.